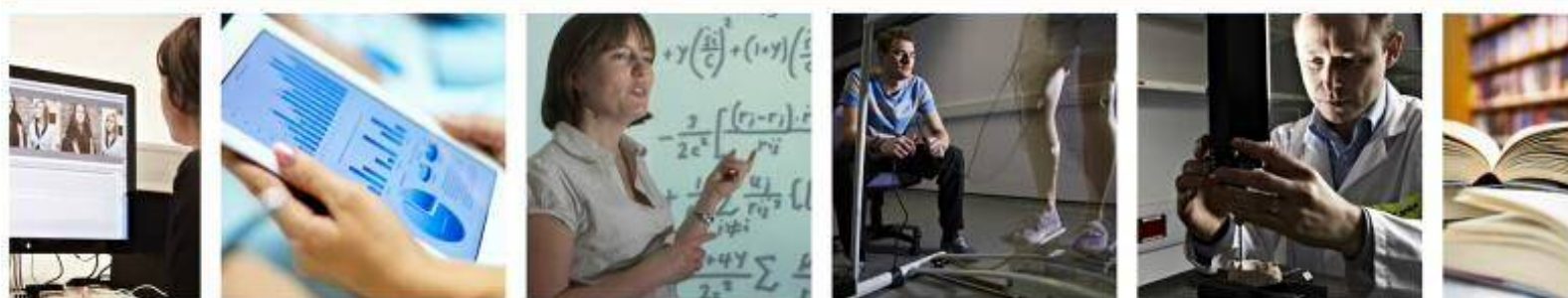


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Conference Proceedings



7th MMU Postgraduate Research Conference 2014



Making An Impact With Research

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The Conference Committee would like to thank all MMU staff and students, especially the following members of staff: Christine Smith, Madelyn Hickman, Professor Jennifer Rowley and Dr. Ken McLaughlin for their assistance and guidance with this conference.

**A warm welcome to Manchester Metropolitan University and
the 7th Annual Postgraduate Research Conference.**

Impact is about making a difference; the demonstrable contribution of your research to society and the economy beyond its academic influence. Impact has been the topic of conversation in many research communities since it was announced that it would be a requirement within the 2014 Research Excellence Framework.

Your postgraduate work too increasingly needs to show current or future social, economic, cultural, environmental, health and quality of life benefits, with the influence of these benefits being seen at the individual, local, regional, national or global level.

This conference, with its specific focus on impact, is an important part of the University's new research and knowledge exchange strategy. The conference brings together postgraduate researchers from many disciplines to demonstrate how students are addressing the impact agenda within their research questions and how this new knowledge can be applied to real-world questions.

MMU's current research:

- underpins international Government pledges on carbon emissions in aviation;
- has helped to save lives by transforming the rapid diagnosis of deadly microbial infections;
- informs two of the protected characteristics in the Single Equality Scheme;
- supports the growth of regional businesses and is transforming the quality of local high streets;
- has changed the approach of every early years education professional in the UK;
- in creative writing and the arts is ensuring that Manchester remains a cultural powerhouse exporting ideas and models for innovation across the international landscape; and
- supports the government agenda on digital by default.

MMU's postgraduate research has contributed to all these impact case studies.

I should like to thank the keynote speakers for their important and valuable contribution to the programme. I should also like to thank the student conference committee - full and part time PhD students from across MMU's faculties, and staff in the Graduate School Office, for their considerable efforts in realising today's event.

To all delegates, I wish you all the very best for a successful conference.



Professor Paul Holmes
Head of Graduate School

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AN INVISIBLE WORLD: DEATHS IN PSYCHIATRIC DETENTION

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Keywords: Mental Health, Psychiatric Detention, Deaths of Detained Patients, INQUEST, Mental Illness, Stigma, Subjugated Knowledge, Bereaved Families, Critical Criminology

Abstract

The numbers of individuals being detained under the Mental Health Act is at an all time high, however there are extensive gaps in knowledge regarding the deaths of individuals who are detained under the Mental Health Act in the United Kingdom. This paper draws upon my own research which aimed to contribute towards filling some of these significant gaps in knowledge through conducting an exploration and analysis of these deaths.

This research challenged the positivistic viewpoint which dominates work in this field and adopted a critical criminological perspective. This allowed the research to examine the ways in which those with mental health problems are marginalized and controlled by more powerful groups in society. Therefore, this research aimed to give a voice to the often subjugated views of individuals with experience in this area. In this case this was legal practitioners who work directly with the pressure group INQUEST in addition to working directly with bereaved families during the investigation and inquest processes.

Questionnaires were utilised to gather data from the legal practitioner participants and the findings of this research highlight a number of key issues: the hegemonic impact of INQUEST; the dissatisfaction regarding the state's response towards these deaths; the differing approaches of coroners; the poor attitudes of some who work with individuals with mental health problems; the failure to appropriately identify risk and issues surrounding gender, age and race in relation to deaths in psychiatric detention.

Overall, with regards to the potential impact of this research, the possibilities are wide-ranging. Firstly, the opportunity for bereaved families to discuss their experiences should never be underestimated and can be utilised to shape improvements in this area. The research can also be beneficial to INQUEST alongside other organisations working in this area such as MIND. Being shortlisted for the Howard League John Sunley Prize 2014 has demonstrated that this research topic has been acknowledged by the Howard League, the oldest penal reform charity in the UK, to be of significant concern. Academically, as very little has been written in this area, this research can also frame future work based upon its findings.

Due to this being such an undeveloped yet important research topic, this research has been expanded to PhD level as there are still many gaps in knowledge which need further critical exploration, particularly the effects of the investigation process on bereaved families.

The EU model, by contrast, was created in a legislative process, making it more rigid and resistant to any change. The European Commission was identified as the main enforcer of EU competition rules in Art. 89 of the Treaty Establishing the European Economic Community.

EXPLORING THE IMPACT OF THE DIGITAL DIVIDE ON CITIZEN USE OF AN E-GOVERNMENT SERVICE: THE NIGERIA IMMIGRATION SERVICE (NIS) WEBSITE

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Keywords: digital divide, location, e-government, Nigeria Immigration Service

Abstract

Introduction

Alongside economies and efficiencies, one of the primary objectives of the adoption of e-government services is improvement in service quality delivered to citizens, and more specifically, the removal of barriers to government services, and the reduction of social exclusion. In other words, e-government is seen as one way of eroding the digital divide. This has been viewed as especially relevant for developing countries, in which the implementation of e-government promises a range of potential social, economic, and political benefits, and can be a significant element in the development of information technology infrastructures and raising citizen skills in the implementation and use of information and communication technologies. However, it has been recognized that there has been inconsistencies between individuals, households and geographical locations in relation to computing facilities, skills and knowledge. This research explores the effect of demographic factors in the use of e-government services.

Design

A comprehensive online questionnaire survey was adopted for this study since potential respondents are scattered across the globe, the potential diversity of the population and the need for a reasonably large sample. Respondents were identified and contacted via snowball sampling. 351 completed questionnaires were returned. This study is unique amongst studies of the digital divide in that the respondents were e-government users, and hence all had some level of online access and skills. Respondents were users of the e-government service provided by the Nigeria Immigration Service (NIS); such users may be located both within Nigeria and elsewhere in the world. Data captured includes demographic data, including gender, age, education, income, employment sector, abode (country of permanent residence), and localization (rural or urban dwellers). Questions were also included on access to information technologies and with previous e-government and internet experience.

Findings

The three key findings from this research:

Based on this research, one would expect that e-government adopted to remove barriers to government services, and to reduce social exclusion. However, findings show that age, level of education, employment status, income level and location, all have a significant effect on e-government users' access to computing facilities and the e-government and internet experience.

Impact of Findings

The widening gap between individuals, households and geographical locations who have and those that do not have access, resources and computing facilities to use information and communication tools including internet is a serious concern despite all the efforts by various governments including the United Nations to address this issue. This widening digital divide will have consequences on important and developmental services such as education (e-learning), economy (online shopping and banking), and healthcare (e-health). This further illustrates the increase rate of poverty in the digital world and the fact that rather than reducing exclusion, it increases it.

Conclusion

This study has offered insights into aspects of the respective digital divide that are often postulated to exist between developed and developing countries, and between rural and urban communities and the individuals. This raises a further question, how can an effective e-government accessibility address the problem of digital divided?

CONNECTING COMMUNITIES THROUGH YOUTH-LED RADIO

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Keywords: *Community radio; young people; youth voice; impact*

Abstract

Impact – That's Music to My Ears

The cuts to government spending, and the concurrent recession, is being felt hardest amongst young people where youth unemployment has recently reached record levels and cuts for Further and Higher Education funding, alongside a significant rise in University fees, is resulting in heightened uncertainty for those under the age of 21. Thus, there is an imperative for research to consider ways to support young people not in education, employment or training (NEET) in acquiring the skills and social capital necessary to gain employment and to understand how community organisations can support young people in continuing in education. The overall aim of my research project is to explore the ways in which community youth-led organisations can build social capital, both 'bonding' social capital (within particular communities) and 'bridging' social capital (across social divides and groups), during a time of intense political, social and economic uncertainty.

The key objectives of this research are:

1. To explore understandings of community in relation to a community radio station, for listeners, staff and volunteers
2. To explore the notion of 'youth voice' in relation to a youth-led radio station
3. To explore the ways in which KCC LIVE acts as a bridge to education and training for NEET young people in Knowsley
4. To document the challenges faced by community youth organisations within a shifting political and economic climate
5. To develop a participatory approach to documenting the value of a community radio station

I address these objectives through a case study of KCC Live, a volunteer youth-led community radio station. The above is achieved through mixed-methods research, including: 12 months participant observation; interviews and focus groups with key stakeholders and youth volunteers; a listener survey, follow-up interviews, focus groups and listener diaries. In addressing the conference theme, my research is impactful in the following ways:

- Preliminary findings have been successfully incorporated into an interim report, used for the re-application of the FM broadcasting license by OFCOM.
- Through the participatory approach, young people in my study have become learner researchers, acquiring new skills.
- I am currently co-producing a documentary with the young people about their perceptions of community, this will be later broadcast on KCC Live; therefore I have helped in producing useable content for the station. Also the process of creating this documentary allows young people to have their voices heard.
- This project will provide an important resource for KCC Live, allowing them to demonstrate the value of their work for future funding applications. Additionally, my research will be disseminated through the community media (COMMEDIA) network to reach other community radio stations, thus allowing others to develop similar participatory evaluation tools.

Certainly, this research is timely given the move away from state funded social support to voluntary and third sector provision of youth services and the competitiveness of funding for such organisations. In sum, my research provides a model for the demonstration of the 'worth' of community organisations.

AUDIOVISUAL TRANSLATION IN TEACHING FOREIGN LANGUAGES: THE USE OF REVOICING TO DEVELOP FLUENCY AND PRONUNCIATION IN SPONTANEOUS CONVERSATIONS

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Keywords: L2 teaching, audiovisual translation, revoicing, fluency, pronunciation.

Abstract

In recent years, information and communication technologies (ICT) have taken a leading role in the communicative process. This has had an impact in people's life who are continuously interacting with electronic devices. Thus, audiovisual media has become the principal means to receive information, and nowadays, not only do societies rely on TV or computers but also on mobile phones and tablets. In the present research, it is believed that this technological revolution can also make a huge impact in teaching foreign languages (L2).

The active use of techniques traditionally employed in audiovisual translation (AVT), such as subtitling or dubbing, constitutes a recent practice in the field of L2 teaching with a positive impact on different skills (Talaván, 2013; Chiu, 2012; Danan, 2010). It has been proved that using AVT has a positive impact on L2 teaching and some of the benefits are (Danan, 2010; Maley & Duff, 2005; Brooke, 2003): (1) the boosting of self-esteem and confidence because the received *input* is multisensory; (2) the boosting of self-awareness and awareness of others; (3) the focus on the student while the teacher's role is guiding; (4) the integration of the language in a natural way; (5) attentive listening as an intrinsic element; (6) the inclusion of verbal and non-verbal communicative elements; (7) interaction with the real world without leaving the classroom as the language is provided in a specific context; (8) the wide variety of skills and learning areas that can be developed using a specific type of AVT, or several of them at the same time.

In this paper, revoicing is seen as a didactic resource consisting of replacing original voices in 2 minute long clips in L2 by the students. This paper primarily looks at the interface between the use of direct revoicing in L2 Spanish (although this could be applied to any other language) and oral expression in non-prepared conversations, with an emphasis on fluency and pronunciation. The pilot study has had a positive impact on 17 English students undertaking Spanish A-level. This first part is mainly a qualitative observational based study and the results have been validated by triangulating the data using individual interviews, questionnaires and teacher's notes. The data has been obtained through the students, the teacher as observer and three native Spanish assessors. The most important finding is that in the short period of six weeks, students have significantly improved the speed of their speech by an average of 22 words per minute. Students also reported an increase in their confidence and comfortableness when speaking the L2. Other learning areas, such as listening comprehension and vocabulary acquisition, improved notably indirectly. The current results cannot present universal validity but the intention with the ongoing PhD study is to provide more information on the field through experimental research.

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ENGINEERING ANALYSIS & DEVELOPMENT OF THERAPEUTIC DEVICES FOR CARDIOVASCULAR DISEASES

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Keywords: Cannula, Computational Fluid Dynamics, LVAD, Thrombosis

Abstract

Introduction

In 2012, the mortality rate for cardiovascular diseases was 28%, second to cancer with 29% (McLaren 2013). Cardiovascular disease covers coronary heart disease, heart failure, ischemic heart disease, congenital heart disease and stroke. Left Ventricle Assist Devices (LVADs) are used to treat patients suffering from heart failure. LVADs are mechanical pumps designed to augment or replace the function of the left ventricle of the failing heart. Even though LVADs have already helped many patients, there is still considerable scope for development. One of the areas that needs development is the onset of thrombosis within the LVAD, and its neighbouring grafts and arteries. Arterial thrombosis is a potentially fatal condition and is associated with stroke, myocardial infarction and peripheral vascular disease. It is difficult experimentally to observe locations at risk of thrombosis, the best way to predict thrombosis deposition is via the use of Computational Fluid Dynamics (CFD). Previous studies have shown the significance of cannula tip design and location on thrombosis and thromboembolism (Menon et al. 2013; Kaufmann et al. 2014; White et al. 2009). However, there is still work needed on the optimisation of the combination of cannula tip design and location. The status of heart failure determines the percentage of blood still flowing from the heart and hence the extent of assistance required by the LVAD. Work by the author has already shown the significance of flow percentages on flow profile, therefore, flow from the heart and the LVAD should be carefully considered when choosing the optimal cannula tip design and location.

Aim

Use CFD to optimise cannula tip design and location to reduce risk of thrombosis and thromboembolism within the outflow cannula and aorta region of an LVAD system. The numerical model will account for flow percentages from the LVAD and aortic valve.

Objectives

1. Review current models for thrombosis within the cannula area
2. Identify an appropriate numerical model to be implemented into the optimisation
3. Utilise the model for a number of combinations of flow percentages of the aortic valve and LVAD. Determine the relative optimal cannula tip design and location.

Results & Discussion

The criteria for optimal cannula tip design and location is to reduce risk of thrombosis and thromboembolism. This is possible by increasing the wash effect of the blood whilst ensuring wall shear stress remains within an appropriate threshold.

The results from optimisation tests will provide data for several combinations of optimal cannula tip and cannula location relative to the extent of heart failure of the patient. The results will be useful for pre-operative planning, whether the patient has total or partial heart failure, the results will be able to direct the surgeon to an optimal combination of cannula tip design and location.

CONTESTING THE METROPOLITAN BIAS OF 'QUEER HISTORY'

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Keywords: queer history, criminalisation of sex, criminal cases

Abstract

With a few notable exceptions, the 'queer history' of the criminalisation of sex between males has been dominated by a metropolitan reading of atypical late 19th century criminal trials. A feature of this historicisation has been how the majority of males who enjoyed sex with other males have been marginalized, because they were from the working and pauper classes. This historical focus is not due to an absence of evidence. As Harry Cocks demonstrated a decade ago, the criminal records contain the particulars of thousands of cases detailing the prosecution of males for the crime of sex with other males. This paper contests the marginalization of work-class males and the metropolitan bias of much 'queer history'. It is based on ambitious PhD research which has developed a longitudinal case study review of 200,000 thousand criminal cases recorded by the police and court records of Lancashire between 1850-1970. The paper reviews the first fifty years of these prosecutions, to provide a unique reading of their incidence and of how contemporaries understood these sexual behaviours and the court outcomes. In particular, it highlights significant differences between this Northern reading of the prosecution of inter-male sex and the Metropolitan-based ones which dominate the existing literature.

MAKING AN IMPACT FROM THE BOTTOM-UP. ACHIEVING POSITIVE OUTCOMES FOR CHILDREN THROUGH AN ASSET BASED APPROACH

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Keywords: education, community, assets, social disadvantage

Abstract

It has long been recognised that there are strong links between social background, educational attainment and wider life chances, whereby schools have come to be viewed as key drivers in the process of social change, as well as mechanisms for urban regeneration (Lupton, 2006). Thus, it should come as no surprise that in recent years, school reform has been on the agenda and has often followed the 'deficiency-oriented' model, where schools and their communities are seen as a set of problems to be fixed through enhanced services and increased funds. Yet, in spite of such externally driven initiatives, led by policymakers and professionals, schools in areas of social disadvantage still find it difficult to have a positive impact upon student attainment and success beyond the school gates. In this presentation, I argue that one significant reason that externally driven projects do not always achieve these anticipated outcomes is simply that they misunderstand the needs of the community in question, thus disenfranchising community members, stifling community knowledge and suppressing community engagement. Instead, I suggest that there are alternative approaches which seek to engage and enable communities to make an impact and drive change *themselves*, through an endogenous, grass roots process. Consequently, this presentation has two objectives.

Firstly, drawing upon my ongoing doctoral research, which is a qualitative case study focussing specifically on the way community assets are used by children in a disadvantaged community and the way this knowledge is used by the local school and other local professionals, I suggest that an asset-based approach, informed by the work of Mathie & Cunningham (2003), Kretzmann & McKnight (1993) and Glickman & Scally (2008), could be used by communities to actively support educational outcomes and wider life chances for children and young people.

Secondly, conceptualised by both *functionalist* and *socially critical* perspectives of education including Robert Putnam's vision of social capital theory and Amartya Sen's capability approach, I develop an exploratory, sensitising framework that aims to generate a rich picture of community assets that could be used collaboratively by community members and local professionals to positively impact educational attainment.

Finally, this presentation concludes by documenting and addressing some interesting and thorny dilemmas associated with an asset-based approach. I consider how to 'map' intangible assets, as well as reflect upon the question of what kind of purposes assets are used for, whether these purposes can be considered valuable or not and indeed, who makes that judgement.

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DESIGN AND DEVELOPMENT OF NOVEL ELECTROSPUN SMALL DIAMETER VASCULAR PROSTHESIS

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Keywords: Small diameter vascular prosthesis, hemodynamics, helical flow

Abstract

There is an acute clinical need for small-calibre (<6 mm) vascular grafts for surgery, but unlike their large counterparts they still fail in long-term clinical application. This is primarily due to early formation of thrombosis and intimal hyperplasia. Dynamics of blood flow leading to wall shear rate, has been identified as one of the major deciding factors for graft efficiency. Research has showed that intimal hyperplasia and associated complications which lead to graft failure, develop preferentially in regions where there is disturbed blood flow leading to uneven shear stress and flow turbulence followed by flow stagnancy in the periphery of the graft. On the basis of these findings and the established advantages of swirling physiological blood flow^{1,2}, the aim of the present study was to design and fabricate a new helical graft that incorporates a swirling flow inducer on the inner surface throughout its axis. Initially, different swirling profiles were analysed using finite elemental analysis and compared with conventional or plain grafts. The analysis revealed that the proposed helical design could indeed produce the swirling blood flow with improved hemodynamic. Compared to the plain graft, blood flow velocity near the vessel walls in the helical graft was significantly enhanced, with uniform distribution of shear stress. Electrospinning was used to fabricate the proposed design and prototype samples were produced using polyvinyl alcohol (PVA) and gelatine. After cross-linking, a number of tests were carried out to test the mechanical properties of the prototype grafts including uniaxial tensile tests, bursting strength tests and suture retention tests. Results were evaluated and compared with those from the standard plain graft. Findings demonstrated that mechanical properties of the newly developed helical grafts were similar to the conventional standard graft and thus creation of helical did not compromise the mechanical properties. Human coronary artery endothelial cells (HCAEC) were seeded on the helical graft using surface seeding technique. At various time intervals (Day 1, 3, 5 and 7) cell proliferation, viability and morphology were observed in the presence of static and circulating media and results were compared with their conventional counterpart kept under the same conditions. Results obtained showed a considerable difference in cell spreading and cell viability in the helical graft compared to the conventional graft. In the helical graft, more uniformly arranged HCAEC were observed with the elongated morphology with increased viability up to 20 to 30%. Pressure myography studies were performed on both grafts whereby after endothelialization, grafts were mounted between two steel cannulae (4mm diameter) and perfused at constant pressure (0-100mmHg), for up to 1 hour. The helical graft withstood the intraluminal pressure, up to 100 mmHg, over the period of 1 hour, while the standard graft failed to maintain the pressure. This phenomenon can be attributed to the formation of uniform layer of ECs in helical graft with physiologically favoured morphology compared to the occurrences of clusters of ECs in conventional graft. Our findings suggest that our fabricated electrospun helical graft is an attractive candidate for use as a potential small diameter vascular graft based on its ability to better mimic the hemodynamic of blood flow, support endothelial cell growth and withstand physiological intraluminal pressure.

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TRANSLATING RESEARCH INTO ACTION: A CASE STUDY OF A RESEARCHER-IN-RESIDENCE ROLE AT THE AHMED IQBAL RACE RELATIONS RESOURCE CENTRE

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Keywords: Researcher-in-Residence, Collaborative Project, Race Relations Centre, Research Impact

Abstract

The Researchers in Residence project, which ran for the first time as a pilot-scheme this year, offered funded internships for doctoral and postdoctoral candidates developed between the University of Manchester Graduate School, Artsmethods and a number of partner organisations (<http://researchersinresidence.wordpress.com>). The project challenged researchers to develop collaborative projects with non-HE cultural partners that promoted collaborative impact, researcher development and knowledge exchange between researcher and cultural partners. Although the projects varied in scope and style, they all aimed to promote research impact through researcher contributions to the development of individual cultural institutions – be this through the application of curatorial or subject-specific expertise, the development of educational outreach programs, or a number of other approaches.

As one of the researchers chosen to take part in the project, I worked alongside the Ahmed Iqbal Race Relations Resource Centre, a specialist Library and Research Centre affiliated with the University of Manchester and based at Manchester Central Library. The Centre focuses on the contributions of black and minority ethnic groups to British, European and American history, and it also holds extensive archival collections for oral history projects and the history of minority groups within Manchester and the Northwest. In the spring of 2014 the Race Relations Centre moved from a location on the North Campus of Manchester University to the newly refurbished Manchester Central Library. Finding a way to assess the impact of this move to a new space, the multiple challenges it poses for both staff and users, and the ways in which this transition has affected the Centre's role and significance both within the University of Manchester and the broader Manchester community was the starting point for my project.

This paper explores some of the challenges I faced in developing a collaborative project with the Race Relations Centre, and how I attempted to apply my own skills as a doctoral researcher to a project which directly measured the impact of a cultural organisation and its changing role within the local academic and non-academic community. I situate my own project within the array of different projects that emerged out of the Researcher-in-Residence scheme. As a whole, the scheme illustrated the diversity of methods by which researchers can broaden the impact of their own research. However, it also raised many questions about the expectations of both researchers and cultural institutions in assessing and defining the value of academic research.

This paper offers a specific and concrete example of how research impact can be measured, and the frequently different ways in which researchers and non-HE partners may define the success or effectiveness of collaborative researcher roles.

ASSESSMENT LITERACY TRAINING: APPROACHING THE MEASUREMENT OF IMPACT

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Keywords: assessment literacy, impact of training, measuring assessment skills and practices

Abstract

Educators' assessment literacy has been an enduring concern beyond the UK (Schafer, 1993; Stiggins, 2014). It has received less attention in the UK. As schools in England respond to devising their own approach to assessment under the National Curriculum for 2014, this could change. The present paper reports the properties of an Assessment Skills and Practices Inventory (ASPI) in which assessment literacy was conceptualised as involving distinct yet overlapping constructs: skills (perception) and practices (behaviour). The ASPI was constructed with intention of providing a baseline against which a post-assessment literacy training (ALT) measure could be compared to show impact.

Thirty-three items formed a self-perceived skills scale (five-point Likert with *No Skill* and *Very Skilled* anchors) and a practices frequency scale (with *Not Used* to *Very Often Used* anchors). The scales were adapted from a previous study utilising 67 items (Zhang and Burry-Stock, 2003). Items formed subscales related to seven competencies in educational assessment. The ASPI was administered to twenty-two educators in the researcher's own setting as part of the school's response to educational reform mentioned above.

Overall, the ASPI's scales showed excellent internal consistency (skills $\alpha=0.95$ and practices $\alpha=0.96$). All subscales had coefficients in the acceptable-excellent range with the exception of the practice subscale for 'Inappropriate Conduct ($\alpha=0.06$). Given that the scales and subscales are generally reliable measures of the skills/practices constructs, the ASPI will be re-administered to determine the impact of training against a baseline established in July 2014.

Strong positive correlation between skills and practices was established using Spearman's rho (0.74). Self-perceived skills explained 55% of variance in assessment practices. In light of this finding, ALT was planned to exploit the reciprocal relationship between the two constructs: lead-in lectures, followup tasks and tutorials. It is hypothesised that a similarly strong positive correlation will be evident post-ALT. Given that 45% of variance can be attributed to other factors – for example, the phase an educator works in and their role – it is possible that self-perceived skill may increase, but not necessarily practices frequencies. This highlights changes to assessment skills are likely to be a better indicator of the impact of ALT. It also indicates a need for quantitative data from the ASPI to be supplemented by qualitative information (semi-structured interviews, for instance) to confirm selfreported data and provide a context for understanding why certain practices continue to show low frequencies of use.

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REBELLING AGAINST THE 'SYSTEM'? EXAMINING CAREERS IN THE SCIENTIFIC CIVIL SERVICE DURING POST-WAR BRITAIN (C.1945-1979)

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Keywords: Government, Science, Post-War Britain, Careers, Oral History

Abstract

In a recent series of interviews which form part of the British Library's 'An Oral History of British Science', Physicist and noted developer in the technology of liquid crystal display (LCD) televisions, Cyril Hilsum, alongside many others often spoke about how working in the Civil Service was like a 'system' of promotions that could help further or potentially stagnate a career in science. Using life-story interviews conducted for 'An Oral History of Science', which has captured the lives and careers of some of Britain's most eminent scientists since 2009, this paper will consider how scientists felt about working in government as Scientific Civil Servants. The life-story methodology, which examines a whole person's life, provides an opportunity to build up a detailed portrait of people's careers and the people they worked with. As it is less constrained by a specific line of questioning or research topic, it also grants a less self-consciously constructed insight into the motivations and decisions of scientists about their careers.

The immediate post-war period was an eventful time for being a scientist in government: the *Barlow Report* (1945) brought into effect a unified 'scientific civil service' whilst the *Fulton Report* (1968) led to the further re-organization of civil service grades, salaries and made the higher positions within the civil service more accessible to those in the specialist grades. But it was also a period of great change for scientists, who were still trying to assert their status, especially within the government, as the demand and recognition of scientists' contribution increased after WW2. This paper will explore the conflicts that the Civil Service system of grades and promotions had on scientists' careers before further changes occurred in the 1980s, ultimately resulting in the sale of many government research establishments. It will consider the impact of gender in affecting promotion but also the issue of age, since many scientists were recruited when they were young and often stayed until they retired. From these findings, we can see how the changes to the organization of the Civil Service in the post-war period affected scientists' careers and how this often strengthened their identities as scientists rather than as civil servants.

The theme of 'impact' is illustrated in this paper from two different perspectives. Firstly, from a historical perspective it looks at the impact of the social and political changes that affected scientists working within the Scientific Civil Service. Secondly, it addresses present concerns about people's participation and experiences of a career in science. Some of the issues that are covered in this paper- such as gender-still remain as important as ever when considering schemes such as the Athena Swann Award to help support women's careers in science in respect of cultural attitudes, personal obstacles and the structural issues affecting women's employment. Studying these issues historically can help us to consider the questions we may want to ask today about careers in science by placing them in a long-term perspective to promote further discussion both within and outside the academic community.

HISTORICAL RESEARCH AND THE IMPACT OF POPULAR CULTURE

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Keywords: research impact, psychedelic scholarship, ontological politics, historical analyses, epistemology, methodology, popular culture

Abstract

According to a recent publication by the Research Excellence Framework (2011), ‘impact’ is assessed on the grounds for which research holds “demonstrable benefits to the wider economy and society” (p. 5). What is more, from analysing the discourse of scholarly impact (e.g. The Russell Group of Universities, 2012), it appears, for perhaps quite obvious reasons, that this agenda is driven by a constant appeal to the spirit of the times. As such, by drawing on Foucaultian critiques within the context of my own historical research, I argue that popular culture not only epitomises the so-called 'Impact Agenda', but also provides the richest source of data; since it offers a representative sample of the majority conception at that time. However, as organisers of the past, this also raises methodological and political concerns in that we must decide to what extent this data is useful. Thus, whereby epistemologically we choose the information that best supports our case (methodology), ontologically, we are forced to make a distinction between reality and non-reality by virtue of our prejudice for what constitutes ‘valid knowledge’ (politics).

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PRODUCTION AND CONSUMPTION OF IDENTITIES AT THE EUROVISION SONG CONTEST

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Keywords: Eurovision, national identity, Europe, fan studies, socio-cultural identities

Abstract

The Eurovision Song Contest (ESC) is a vehicle for nation-states to perform their identities on an international stage and express Europeanness (Jones and Subotic, 2011). The ESC performs banal Europeanness on an everyday level, and merges the peoples of Europe into an imagined European community, through popular culture and everyday life (Cram, 2009). The ESC creates ephemeral environments through which Europeans unite and perform Europeanness and involves both producers and consumers. These actors create discursive arenas through which social identities are constructed, deconstructed and reconstructed. It is the aim of this research to explore the ways in which national identities and banal Europeanness are performed and consumed by ESC fans.

Design and methods

Fieldwork was conducted in Copenhagen during Eurovision week in May 2014. Interviews were conducted with ESC fans within ESC spaces. Eleven semi-structured interviews were conducted and averaged at 15 minutes in length. Fans were asked to identify aspects of the ESC and formations of identity they associate with, as well as asking them about the representation of UK entries and the ESC-related events they have attended.

Findings

The analysis stage of this research is still on-going, but is currently being decoded and deconstructed. Initially, participants from Europe identified themselves more strongly to European identities rather than their national identities. UK participants were less likely to identify with a European identity, and identified being with Europe geographically, but not socio-culturally or politically.

Conclusions and implications

While the analysis of this research is still on-going, it has been identified that Europeans were less likely to identify meanings from UK entries. As the UK has used an internal song selection procedure for the last four years, there has been limited television exposure of its entries. Therefore, it maybe more appropriate to focus on a national selection show that is more accessible to ESC fans, particularly the Swedish *Melodifestivalen* which is undeniably the most famous. As the ESC also involves media producers, it will be appropriate to enquire as to how these individuals reproduce and construct Europeanness and socio-cultural formations of identity. Such actors incorporate ESC web designers, bloggers as well as individuals involved with the production of ESC entries. Further research may involve using innovative methodologies, including the analysis of Twitter feeds and fan interactions with the ESC and national selection shows. Also, ethnographic documentary data from ESC parties can be conducted, which will involve individuals to take a video or audio diary of their ESC party and reflect on it afterwards.

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BREACH OF CONTRACT OF EMPLOYMENT IN LOCAL GOVERNMENT- A DISCIPLINARY CASE ANALYSIS

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Keywords: Age, Gender, Tenure, Absenteeism

Abstract

Serious Transgressions in the Workplace.

Outline

Workplace transgressions by the employee are a daily feature in many reasonably sized organizations and in the main are dealt with informally by supervisors/managers. However, formal disciplinary action may be necessary where the extent of minor infringements continues, or the misdemeanour is seen as serious. This research focusses solely on those cases deemed to be at the serious end of the conduct continuum.

Design

A longitudinal five year analysis of a major employer's disciplinary records produced 263 cases. Unlike most research which has tended to use general workplace surveys capturing an individual's interpretation as to their own and occasionally others misdemeanours, this work used only data from formal investigations and is thus less subjective. The demographics of age, gender, ethnicity, disability, tenure, trade union membership, hours worked, and pay were monitored; along with case specific detail about type of offence, severity of disciplinary outcome, if employee appealed and outcome, process duration, was the employee suspended, and absenteeism in the year prior to the offence. These variables were analysed against the overall workplace data, the census, and in one instance against crime data. Bi-variate analysis has produced some results (see below) and regression analysis will follow.

Outline of Findings

A number of hypotheses based on personal experience and extant research guided my research which in outline show:

- Age, tenure, gender, and absenteeism are all statistically significant variables.
- Ethnicity and disability dataset too small to draw firm conclusions.
- Types of offence and gender are significant.

Impact of Findings

The scale of employee theft and fraud accounts for approximately 30% of business failures. Workplace misdemeanours range far beyond issues concerned with money and include sexual offences, IT misuse, insubordination, assault etc., including occasionally conduct outside work which impacts on the contract of employment. Resolution of these cases is very resource intensive and is a major distraction for all concerned from the principal task of just running the business. These metrics will contribute to a better understanding and in part alleviate what in the UK sees about 1.2m. cases per year. Improvements may be by better gatekeeping at appointment, improved induction and ongoing socialization, appropriate training and being far more proactive. My host employer has incurred excess costs of over £0.25m. for suspended employees during the disciplinary process, and £0.17m. in excess sickness pay on disciplined employees compared to the workforce as a whole.

Conclusion

The metrics produced from disciplinary case analysis highlight essentially how *justice* is administered by this one employer; but the next step and more fundamental question arises as to how, and on what information and at what stage in the process do individuals arrive at a *justice* judgement.

MAKING CONNECTIONS: EXPLORING RELATIONSHIPS BETWEEN THE HOME AND SCHOOL LITERACY PRACTICES OF SOMALI CHILDREN IN YEAR ONE OF PRIMARY EDUCATION

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Keywords: boundary-crossing, home-school literacies, third space dialogue, photography

Abstract

This research is situated within current government priorities for primary education. It investigates the relationship between the home and school literacy practices of two Somali children in year one of primary education, both of whom are growing up in multilingual families. Engagement with home and community literacy practices is a vital part of the development of young multilingual children. Families and communities provide invaluable support for language development and literacy learning in many different ways, however, these are not formally recognised in detail in the national curriculum guidelines for primary English. The research outlined in this paper has three overarching aims: to explore how literacy learning in the home can be an enabling factor for language and literacy development at school; to examine the potential for re-contextualising home literacy practices as school practices and to explore, through dialogue, the manner in which resulting hybrid practices can be enacted in practice.

This research investigates how literacy is valued in the domains of home and school and focuses on language and literacy learning across the home-school boundary. I use a conceptual framework which incorporates Moll et al's (1992) theories of cultural funds of knowledge in the home, which children will draw from in order to help interpret the world around them, and Cremin et al's (2012) concept of teachers researching children's literacy lives. I also draw from Gutierrez's (2008) theories relating to learning in the third space, where dialogue and collaboration between several parties can lead to the formation of hybrid practices and approaches.

I have designed my research around two main research questions: what is the relationship between home and school literacy practices and how can we construct effective hybrid literacy practices at school using funds of knowledge from the home? By using data generated through participatory photography in the home, focus interviews and observation at school, I aim to explore potential opportunities for re-contextualising home literacy practices as school practices. Photographs of literacy practices taken in the home are regarded as boundary objects facilitating dialogue between the home and the school, with a view to re-conceptualising literacy teaching and learning strategies for multilingual children in the early stages of primary education.

It is my intention that the outcomes of this PhD research will make an impact on teaching and learning practices in early primary education through the transference of knowledge across the homeschool boundary. I aim to make a new and different contribution to multilingual education and research by exploring the home literacy practices of an under-represented group in this field. I will build on the research profile currently being established through the work of Multilingual Manchester and make a contribution to the University of Manchester's core strategic goal of social responsibility: engaging our local communities in research with impact.

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A QUALITATIVE INVESTIGATION OF FACTORS THAT MATTER TO INDIVIDUALS IN THE PAIN MANAGEMENT PROCESS

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Keywords: Chronic Pain, Patient Satisfaction, Patient Perspectives

Abstract

Background

Chronic musculoskeletal pain is a complex condition and one of the most significant causes of suffering in the United Kingdom. Due to its complexity, chronic pain is a challenging condition to treat with widespread consequences such as physical disability, psychosocial effects and increased use of healthcare. The ways that patients perceive and interpret their condition is an important determinant of how they will respond to management and their resultant disability including their persistence in the care system. Previous research has found that patients' experiences within the health care system can be influenced by factors such as their expectations, therapist characteristics and treatment process.

Objectives

This study aimed, through the use of patient interviews, to identify the key factors that influence individuals' experiences in the management of chronic pain.

Design

A qualitative study using semi-structured interviews in either a home or hospital setting.

Methods

Semi-structured interviews were conducted on eight participants attending a hospital-based pain management unit. Participants were asked about their experiences of pain management and living with chronic pain condition. Interviews were transcribed and analysed thematically.

Results

From the participants' perspectives of the treatment process there were three main themes; the impact of their condition on daily life, clinical interactions and the pain management process. Participants' lives were perceived to have changed considerably due to their condition. Understanding their condition was a key factor for participants, in particular, the explanation from the clinician often helped them to cope better.

Conclusions

This study highlighted important factors for healthcare professionals and patients in the management of chronic pain. Participants indicated a desire to understand their condition more and learn strategies for self-management to allow them to cope better. As patients found benefit from being involved in the management process, more discussions around the options for treatment may enhance management or promote rehabilitation. It is important we continue to research factors that are important to individuals with musculoskeletal pain to find an effective, evidence-based framework for understanding and managing this condition.

ACTION RESEARCH –‘DELIVERING FRONTLINE IMPROVEMENT’

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Keywords: Action research, curriculum evaluation, listening to students, delivering change.

Abstract

This presentation will share the experiences of a second year PhD student engaged in participatory action research. It will explore the positive and provide examples of the positive impact this methodology can deliver in practice. There will also be a discussion of the practical challenges involved in maintaining momentum, and share the strategies employed to overcome these.

The aim of the research study is to explore the challenges facing critical care nursing education in its transition towards an all-graduate specialism. The action research is centered around the ongoing development of a higher education critical care programme which MMU delivers in collaboration with NHS partners. It represents a desire to gain a deeper understanding of how we can provide critical care nurses with education that is effective in meeting their academic and practice needs.

Research objectives

- To investigate the teaching practice in order to inform the planning, implementation and evaluation of strategies designed to assist students to develop graduate level skills.
- Develop increased understanding and insight of how teaching methodologies impact the student learning experience.
- To improve the educational impact of the Critical Care Programme by raising students ability to critically reflect and integrate theory to their clinical practice

Research design

Action research is recognised as being effective in curriculum evaluation and development, and a collaborative approach to inquiry (Scott and Usher, 2011, Stringer, 2007). A two-year study was designed to provide four action research cycles in which we would gather and analyse data for consideration by the management committee leading to programme change.

Methods

- Focus groups were used in combination with questionnaires to allow us to explore the explored the views of all the key stakeholders (all students, tutors, managers).
- Classroom observations were used to evaluate if the teaching methods and content were aligned to meeting the learning outcomes of the curriculum
- Statistical analysis of student performance

Discussion

The inclusive participatory approach has generated fresh insights and had a major impact in providing students with an influential voice, from which we are all learning. It has proved challenging for the researcher, with the research schedule driven by the curriculum timetable, combined with a need to rapidly analyse and share large volumes of accurate data in order to maintain the momentum of rational change within a large team.

Results and impact

- We have a clear vision amongst all key stakeholders on the purpose of the programme
- We understand our student's motivations, expectations and learning needs. We are changing the education to link theory directly to practice.
- Teaching is now underpinned with a robust evidence-base, case studies support critical thinking like a nurse, focus on care and are designed to link to academic assignments.
- Improved patient care: 91% of students report that the programme has positively influenced their clinical decision-making, and 71% reported that their academic studies had improved their patient care.
- We know our students complete the programme as competent critical practitioners, who feel confident in their ability.

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CULTURE OF DISENGAGEMENT: CRISIS MANAGEMENT FRAMEWORK FOR ORGANISATIONS IN CRISIS

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Keywords: Crisis, Environmental Risk, Terrorism, Crisis Management Model

Abstract

Managing crises and disasters have endless challenges, complexities and networks of spaces in both vulnerability and resilience. In fact, the unconventional nature of today's crises and disasters (whether terrorism, environmental crisis, natural disasters, etc.) have consistently demonstrate the fundamental need to rethink prevailing methodologies to deal with unconventional nature of terrorism and environmental crises, for example. The relevance of this research include the demonstration of what constitute self-inflicted crises and disasters, provide empirical evidence on how to deal with unconventional nature of terrorism, provide in-depth accounts of how moral disengagement mechanisms enhance terrorism, and reveals possible means of averting the black swans implication. This research is motivated by the need to understand why people engage in act of terrorism and why despite efforts of legitimate governments of several countries to deal with crises of terrorism, the trends appear to be escalating.

The research employed a case study design to map the concepts of crisis management and utilizes ethnographic treatment of data. The case study is embedded and rooted in ground theory analysis. The fundamental concern is how do the research findings impact the way crises are managed and the nature of that impact. The results and findings from the research will translate to help several stakeholders understand why people engage in terrorism, how to deal with the crises, and appreciate unconventional response methodologies of handling such crises. The outcomes have both practical and policy implications.

PERSONAL MYTHOLOGY & THE IMPACT OF RESEARCH ON SELF

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Keywords: Music, Romanticism, Surrealism, Practice

Abstract

"Science is not an illusion. But it would be an illusion to look elsewhere for that which science cannot give us": Sigmund Freud's assertion is true not only with regard to Sciences but also with regard to Arts and Humanities in general. We must ask however, what is that we look for. Especially in regions where economic crisis has hit we observe a lust for the technical aspect of Science. Somehow, this aspect seems to be the vehicle which will take us to the eminent position of the market player.

Yet, scientists of today just as of any other time do in fact strive -and achieve- to expand the existing knowledge and with it, more advanced ways of dealing with the problems of life are ever being codified and thus rendered more immediate, more accurate, and more effective. Hence, the impact of research in science is (as a rule) obvious. We know for example where to turn about health matters, as medicine is crowned with the humanitarian laurels. The same is true for other branches in the tree of hard science: even behavioral sciences such as Economic Theory constitute self-correcting attempts to find ways that will successfully regulate human affairs.

In their practice, scientists often work in the manner of artists: they are preoccupied with the parameters of elegance, and of the philosophical relevance underscored in their work. The persistent question of what is it that the scientific result discloses for the world may not necessarily be of greater gravity in the scientists' minds than the parameters aforementioned. Artists on the other hand may be deprived of the aura that surrounds the scientific method; even if Martin Heidegger once proclaimed that in reality, what separates science from art is not rigor but precision.

The Practice-based researcher, eventually has to admit that artistic insight, however apocalyptic it may be, will -and has to- be 'crushed' by the weight of comparable scientific insights. Jazz Pianist and Educator Kenny Werner admitted during one of his clinics that "we could probably live without music". Such intriguing statement coming from a true advocate of art invites endless argument. We cannot say the same for science; for we know what it would mean having to live without Medicine or Astrophysics.

This paper discusses the impact of research on, no other than the self. Through a reflective account of my PhD study, I intend to examine how research can enhance profoundly the researcher's outlook even in matters outside the main scope of one's study. Initially a study in Intertextuality, my research eventually occupied more transcendental territories. Specifically, the search for Romantic Elements in the output of certain Modern Jazz Pianists, introduced me to the notion of 19th-century Music Romanticism as the essence of individuality. Drawing from Literary Criticism, I learned about Surrealism as a fundamentally 20th-century romantic movement. Romanticism as Freedom, Surrealism as Liberation, and the making of Personal Myth, all, notions discovered through research, constitute the question of *impact of research on self* a legitimate one.

"MAKING AN IMPACT WITH RESEARCH ON LIFELONG LEARNING AMONG ACCOUNTANTS: A TRIPARTITE PERSPECTIVE OF LEARNING PRACTICES"

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Keywords: Lifelong, Learning, Practices, Impact, Change, Sensemaking

Abstract

This presentation outlines my ongoing doctoral research into the formal and informal learning practices of accountants, and how they make sense of recent structural changes to the accountancy profession which impacts their learning. My aim is to first, explore how the learning practices are differentiated among accountants; and secondly to make a contribution to both academic and professional debates on the need for continued professional learning in an era of *turbulent* changes (Evetts 2012).

Billet and Newton (2010) describe learning practices as, involving the interplay between the agency of the individual learners and the workplace support structures or systems. However, based on my initial readings from both academic and professional literature, I am developing an argument that will extend this definition of learning practices. And that argument is that, in order to make a meaningful impact, research on lifelong learning practices within the accountancy profession, should be viewed from a triangular perspective that incorporates attention to the agency of the individual professional, and two dimensions of structure being workplace support systems, and professional regulatory bodies. This is because in addition to certification and regulatory activities, professional associations/bodies also have a duty to facilitate CPD opportunities and resources, by assisting professional accountants to meet their responsibility for lifelong learning (De Lange et al. 2012, p6).

By integrating these three parties, the perceived gap between rhetoric and policy (Field 2006) can be narrowed. People in professional practice are likely to take an active interest in academic research and their output if their interests are considered throughout the research process. Also, the language of research output and reports should be easily understandable and not so much engulfed in theoretical concepts that will be difficult for non-academics to understand and appreciate.

Conceptually, I am looking at the accountancy profession as a field within which different professionals and institutions interact as well as compete depending on their capital. The study is in the form of a qualitative nature and incorporates semi-structured interviews with accountants working in different economic sectors within the UK, and documentary analysis of policy texts from the professional accounting regulatory bodies.

It is my hope that by the time of the presentation, I will have some data and interim findings which I will be analysing thematically and looking out for any emergent theoretical leads that sheds light on how the interplay between structures and agency can help understand the learning practices of accountants. I will draw on Bourdieu's work on field, capital, habitus, and doxa to form the core of my theoretical framework because these concepts ('*thinking tools*') are integrated, and can help in appreciating how inequalities among different organisations within the same profession (field) in terms of power and resources can significantly affect learning practices (Hodkinson et al. 2007).

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THE INFLUENCES OF GADAMER IN ACKNOWLEDGING THE PATIENTS PERSPECTIVE AS EVIDENCE FOR CULTURAL CARE

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Keywords: Phenomenology, Interpretive hermeneutics, Culturally Appropriate Care, Patient centred care

Abstract

Evidence for providing what is deemed as cultural care is normally based on a combination of cultural care theories, books or government directives on ethnicity and diversity. The content within this evidence ranges from what 'other' communities need when ill or in hospital and from overt, obvious differences in daily living practice (such as death, dying and dress) from the majority population. Provision of cultural care is then based upon providing services that cater to these obvious needs and can be limited to individuals that look different from the majority population.

This presentation intends to concentrate on the rationale and initial analysis of an on-going PhD doctorate entitled, "What do patients perceive as Culturally Appropriate Care?" and will illustrate the resonance between this philosophy and situating the emerging analysis. This interpretive phenomenological hermeneutic study, influenced by the writings of Hans-Georg Gadamer will consider the importance of basing cultural care on what patients themselves may perceive as culturally important and as a point in equality, is a requirement for all patients, whether they are from the majority or minority population.

SOCIAL ENTERPRISE ACTIVITY IN GREATER MANCHESTER: MAPPING THE SECTOR

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Keywords: Social Enterprise, Greater Manchester, Mapping, Impact

Abstract

Social enterprises are businesses with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximise profit for shareholders and owners. This definition, from the Department for Trade and Industry, outlines two core features of social enterprises: (i) they have social aims, and (ii) they meet these aims through trading. Government data indicates there are 68,000 in the UK (although this has been disputed), contributing nearly £20 billion to the economy annually and employing over 800,000 people. Despite their significant contribution to the economy, research on social enterprises, particularly at the regional level, is surprisingly scarce.

The aim of this research is to partially fill this gap by building a profile the social enterprise sector in Greater Manchester with information on purpose, legal status, finance and number of employees. This will allow us to consider the impact that social enterprises in Greater Manchester have on the local economy, in terms of the revenue they generate, which markets they operate in and how many people they employ.

The methods used involve secondary research supplemented with primary research. The membership directory of Together Works (TW), the regional network for social enterprise in Greater Manchester, has information on over 100 organisations, which has been combined with data from the Guardian social enterprise network, ClearlySo, Buy Social, SEUK, Social Enterprise Greater Manchester and key informants, resulting in the identification of over 200 organisations with information on purpose, type and legal status. TW also has data on number of employees and financial information. As the other sources do not have this data, I distributed a short questionnaire, via SurveyMonkey, to these organisations in order to supplement the TW data.

The findings indicate most social enterprises are active in 'community development', 'training for individuals' and 'health and social care'. They contribute £20 million annually, which represents more than one per cent of Greater Manchester's annual turnover. They also employ nearly 500 people, which is significant given that social enterprises tend to employ people that other organisations generally avoid, such as people with learning difficulties, exoffenders and those without any or with few qualifications. They are also more likely to operate in deprived areas than other organisations. This means that they have great potential for making a positive impact on the region by (i) employing people that find it difficult to find work, and (ii) through the work that they do, which is focused on improving the lives of individuals and communities. Given that work has a profound effect on an individual's health, and that a large proportion of these organisations operate in health and social care, these organisations can have a profound impact on social and health inequalities in Greater Manchester.

By highlighting the valuable contribution social enterprises make to the region, it is hoped that this research can help raise awareness of them and the important work they do; this will be achieved by sharing the findings with local organisations and disseminating them through regional networks, via bulletins such as the Voluntary Sector North West's monthly bulletin, and national bodies such as Social Enterprise UK.

A REFLECTIVE ACCOUNT: I AM AN AFRICAN FEMINIST, AM I MAKING AN IMPACT?

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Keywords: African feminist principles, Researcher positioning, Research impact

Abstract

Research Councils UK (RCUK) defines research impact as 'the demonstrable and [evidential] contribution that excellent research makes to society [economically, socially and politically]. Research impact encompasses all research related skills that benefit individuals, communities and society as a whole. Additionally, research must contribute to new academic knowledge. There are a lot of debates in various disciplines on what constitutes research impact and how it can be evaluated. This paper is a reflective account of the questions on what constitutes research impact, its evaluation and my position as an African feminist, whose thesis employs Intersectionality, as a theoretical framework underpinned by African feminism(s). The aims of the research are to identify cultural and social resources that Zimbabwean migrant women use to construct their cultural identity. Secondly, to explore how the women use these resources to maintain and negotiate their identity in the UK. The research utilizes focus group interviews with Zimbabwean migrant women community groups as a method to collect data. African feminist principles (Chilisa and Tseane, 2010) emphasize the need for the researcher to understand their positioning, as 'activist', 'transformative healer' and 'bridge builder' and the social, economic and political impact their positioning has on the groups they are researching with. They further argue that knowledge production methods should be sensitive, engage with communities and help bring about transformations. This reflective process had led me to understand Zimbabwean women as agents of their own lives and to honour their cultural and social contexts. As an African feminist, I have a responsibility to add to academic knowledge on migration and cultural identity construction that is context specific. Furthermore, contributing to building migrant women's communities and individual lives. On reflection, I have come to understand that research impact is not an end product of research, but an important part of the research process.

PRIMARY SCHOOL COUNCILS: ORGANIZATION, COMPOSITION AND HEAD TEACHER PERCEPTIONS AND VALUES

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Keywords: composition, councils, head teachers, organization, primary school

Abstract

School councils have been an integral part of primary school life for the last decade and, despite not being mandatory in England, they are now to be found in the vast majority of primary schools. This research article aims to examine the current position of school councils in terms of their organization, the issues they address and the views held by senior leaders regarding the setting of agendas, their management and composition. The fieldwork took place in 50 primary schools within one local authority in the North West of England. This involved quantitative analysis based on a questionnaire sent directly to the head teachers. The data confirmed the widespread use of councils, with 100 per cent of responding schools having one in place. Certain themes relating to school council membership emerged, such as a positive emphasis on councillors being role models and possessing strong organizational and communication skills. Little importance, however, was given by head teachers to high academic attainment or creativity. The indications given by school leaders is that there is a clear commitment to having in place effective mechanisms via which children can raise their views, ideas and concerns, whilst promoting equality. However, in practice the emphasis on effective communication skills appears to actually limit the diversity of children actively taking part in primary schools councils. Therefore, school leaders need to take steps to allow a wider intake into their councils, in order to generate a truly representative council.

Impact of Research

Very few undertakings within human society have had either the impact or cost as has the continuous pursuit of democracy. Yet, right is now, this is both taken for granted and, in many cases, ignored. The rationale behind this trend is complex and not in the remit of this paper, however, the decrease in turnouts for UK general elections, from 84% in 1950 to only 65% in 2010 is concerning. The impact of our paper, therefore, can be viewed as providing an insight into the democracies and social equality in operation within our primary schools and, thus, an understanding of how children view their first experiences of voting and how this might shape how they exercise their future democratic rights.

CHILDREN WITH MULTIPLE STAYS AT NORDIC REFUGES FOR ABUSED WOMEN: CONCLUSIONS, CHALLENGES AND CAUSES FOR CONCERN

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Keywords: children in refuges, domestic violence, social and psychological difficulties

Abstract

This article sheds light on the situation of children in refuges for abused women in the Nordic countries, with a special focus on children with multiple stays. Almost as many children as women live in refuges, but research on this marginalized group of children is scarce. This article overviews and summarizes existing quantitative and qualitative data to examine what we know about children in refuges in a Nordic context (Denmark, Iceland, Finland, Norway and Sweden). The literature shows that focus on children at the refuges is gradually increasing. However, major discrepancies among the Nordic countries exist in terms of which data are collected (if any), how it is presented, and what services and help are provided to children. The article also identifies and discusses some of the challenges faced by children with multiple stays at refuges: their prolonged exposure to domestic violence, disruptions in close relationships and repeated disruptions in preschool and school attendance. The available literature suggests reason for concern in regard to the risks of developing social and psychological difficulties, limited access to resources that can help develop resilience to violence, and school failure and drop-out. The article calls for further research on this particularly vulnerable group of children.

LIFE IMITATING ART- THE INFLUENCE OF BOLLYWOOD FILMS IN SHAPING PERCEPTIONS OF WOMEN AND VIOLENCE

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Keywords: violence against women, India, impact of films

Abstract

The Indian film industry is both economically and socially influential in not just India but around the world. At times Bollywood (Hindi) films have challenged the dominance of Hollywood in terms of popularity. A cultural point of reference for a large majority of Indians the industry is fraught with problems. Accused of misrepresentation of issues such as gender, sexuality, disability, ethnicity, caste and class the industry has often been able to justify this. Social realities in India bring to attention the mistreatment of women in everyday life. The problem is compounded when Bollywood films are often used as a means of socialisation. On screen violence and the eroticisation of violent crime against women poses a problem for women who are subjected to events similar to the ones on screen. This paper does not suggest that on screen its viewers directly imitate violence but that the gradual desensitisation and lack of positive images in conjunction with other social factors have a role to play.

Women's sexualisation on screen in popular films is rarely questioned it is also presented in a subversive manner. Common tropes include women in saris under waterfalls or westernised women presented in a sexualised manner. The viewers (male) are invited to be voyeurs in these titillating scenes. On screen portrays have often served as models for learning about sexuality and gender which makes misrepresentation problematic.

Impact

This study looks at how the everyday lives of women in India are affected by its cinema. Violence against women in India is a growing problem, one that needs solving. Bollywood is deeply embedded in the social conscious, however it needs challenging and critiques. My paper will attempt to illustrate how on screen violence can be seen in everyday incidents some of which have made international news. Analysing the discourse around films I will attempt to show how these incidents and the explanations for their occurrence bear a striking similarity.

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PERCEPTION AND PRACTICE: DEVELOPING AN INCLUSIVE LEARNING FRAMEWORK FOR TEACHERS OF DISABLED PUPILS IN NIGERIA AND IN DEMOCRATIC REPUBLIC OF CONGO

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Keywords: Inclusion, Inclusive education, Disable, Disabilities, Cognitive Impairment

Abstract

The study aim to investigate the factors that pose a barrier towards Inclusive Education for disabled pupils in both Democratic Republic of Congo and in Nigerian Schools by addressing the following: the effect misconception and socio-cultural factors have on inclusive learning for disabled pupils, and the extent teachers and education providers limit the acquisition of inclusive learning for disabled pupils in both countries.

The design applied within this study is a mixed method involving a qualitative and quantitative approach of data collection. These were used broadly as instruments to carry out survey questionnaire containing some open ended questions and others with likert-scales. 516 Primary and Secondary school teachers participated. The questionnaire were sectioned to address 5 main factors namely, Teacher's attitude towards disabilities, Classroom management skill, Teacher deployment system, Parental Involvement and Resource/funding Issues.

The findings within the data analysis reveals that University graduate teachers in Nigeria do not consider teacher training as important and those that went through teacher training colleges did not acquire university education and thus, lack adequate subject knowledge required to be fully competent. The trained respondents indicated more confidence in their professional competency to teach disabled pupils than their untrained counterparts. A question was posed to find out how many of these teachers are aware of the real concept behind the word "cognitive disability and impairment". 21% of teachers from both Nigeria and in DRC are unsure of what non visible impairment means, instead, they are only aware of the visible physical impairment which is characterised by the medical model of disability. Also, 23% of teachers in Nigeria and 32% of teachers in DRC do not know about the existence of non-visible impairment in their pupils, only 56% of Nigerian teachers and 47% of the DRC teachers claim to be aware.

In both countries, due to the negative effect of the Medical model of disability, "many visibly disabled people internalise the negative message that all disabled people's problems stem from not having 'normal' bodies" (Carson, 2009), and this led them to believe that their impairments automatically prevent them from taking part in social activities. "This internalised oppression could make disabled people less likely to challenge their exclusion from mainstream society" (Carson, 2009) and thus, from mainstream classroom too. Other barriers expressed by participants in open-ended comments are; lack of enough teaching resources, and adequate classroom accommodation for their pupils.

In conclusion, the study shows that teachers are inadequately trained, are ineffectively deployed by the school authority and are generally undervalued by the community.

Recommendations are made on areas to be addressed in a further research in order to successfully domesticate a pedagogical model of framework to be used by teachers and training organisations in these two countries for successful practise of classroom inclusive teaching of disabled pupils.

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CONSUMERS' PERCEPTIONS OF AND RESPONSES TO ADVERTISING CREATIVITY

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Keywords: Advertising Creativity, Consumer Perceptions, Consumer Responses, Advertising Effects

Abstract

Creativity has a strong influence in advertising because it is the “raison d’être” (Koslow et al., 2003, p.96) of the industry. Although many within the industry appreciate this it is no secret that creativity is subjective and may be influenced by the “eye-of-the-beholder” (Reid et al., 1998, p.3). Therefore it needs an identification of what it is comprised of and a conceptualization so that there can be agreement on what is creative and what is not at least to a degree if not all. Divergence and relevance are accepted as the two overarching dimensions of advertising creativity (e.g. Lehnert et al., 2013). While these two dimensions are formed by various sub-factors generally divergence refers to different, novel, original, unique or unusual elements in an advertisement. However not all advertisements that are unique, novel etc. can be creative unless they are meaningful and relevant to the target audience in some way.


While research on advertising creativity has expanded over the last decade there is still more to understand and reflect about the concept considering the importance of advertising effects on consumers. Using the hierarchy of effects theory, one of the first sequential models that explain consumers’ responses to the advertisements as a step-by-step sequence when they are exposed to ads (Fill et al., 2013), a deeper understanding of consumer perceptions of and responses to creative advertising can be achieved. Therefore if a sequential modelling is considered for consumers’ perceptions of advertising creativity, the perceived advertising creativity dimensions form the first layer whilst the next layers can be the outcomes of these perceived dimensions. Furthermore this second layer in which outcomes of advertising creativity develop might be considered as a two phased flow in which the attention and attitudes toward the ads lead to the consumers’ engagement to the creative ads as an ultimate outcome.

The research objectives are to unveil the perceptions of consumers with regard to creative advertising, to analyse and examine their responses to it, and the factors that influence them with regard to creative advertising and its dimensions. In order to fulfil the research objectives a quantitative approach with a descriptive design will be employed in which the respondents would need to complete an online questionnaire with measurement items adopted from the literature. This research will make an impact on advertising research by contributing to the uncovered knowledge of consumer perspectives with a deeper understanding of their perceptions of advertising creativity, the relationship between their perspectives and their responses to it in terms of attention, liking and ultimately their levels of engagement towards creative advertising. Thus it is expected to have implications for advertising practitioners as well as the researchers in terms of impactful opportunities and more advantages in communicating with consumers.

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THE RES PROJECT (SOCIAL ECONOMY NETWORK) AND COMMUNITY-BASED SUSTAINABILITY: AN ITALIAN EXPERIENCE OF COMMUNITY ACTION



The RES project (Economic Social Network) and Community Development An Italian Experience of Community Action and Liberation

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The Distinctive Contribution of Community Development

CD consists of six progressive components. These follow on from each other, building up a combined effect. Additionally each stage has authentic outcomes of its own. Other community practitioners may adopt one or more components in isolation. Only CD pursues the whole process through its six components.

Role	Outcome
1. Help people see that they have common concerns about local or other public issues and they could benefit from working on together under their own control	<ul style="list-style-type: none"> Reduction of isolation and alienation Increase in social capital and co-operation
2. Help people to work together on those issues, often by forming or developing an independent community group, supporting them to plan and take actions, and encouraging evaluation and reflection as a way of improving effectiveness	<ul style="list-style-type: none"> Creation or improvement of bona-fide community groups Increase of opportunities for activity in the community More effective community activity
3. Support and develop independent groups across the community sector non-directively but within an ethical framework, and increase networking between groups	Increase in: <ul style="list-style-type: none"> Community sector Volunteering Mutual aid and autonomous services Learning between groups Improvement in conditions in the locality
4. Promote values of equity, inclusiveness, participation and co-operation throughout this work	Increase in: <ul style="list-style-type: none"> Participation Social capital Co-operation Community cohesion
5. Empower people and their organisations to influence and transform public policies and services and all factors affecting the conditions of their lives	<ul style="list-style-type: none"> Community engagement and influence Improvement in: <ul style="list-style-type: none"> Dialogue between community and authorities Coherence and effectiveness of public policies
6. Advise and inform public authorities on community perspectives and assist them to strengthen communities and work in genuine partnership with them	<ul style="list-style-type: none"> Increased capacity of agencies, authorities and professions to engage with communities Improvement in delivery of public services Increased resources for the community sector

The RES Project's goals

The RES project aims to achieve the following goals:

To promote and implementing a network of social economic good practices.

- To promote people's capabilities with particular attention to the more disadvantaged subjects.
- To spread practices of respect for cultural diversity aimed at building educational and collaborative communities.
- To make the actions of the local public administrations available, transparent, and traceable.

Future prospects for the RES Project

The RES project is underway to undertake further actions of coscientization and community development in the following areas:

- Agricultural sector. The project is promoting sustainable local development (i.e. use of renewable resources) in contrast to the waste of natural and public resources that has been perpetrated in the past by the organized crime.
- Sustainable tourism. This is aimed at highlighting the environmental and communal resources as well as fostering social encounters and socialisation between cultures while presenting the local historical, social, cultural, and environmental beauties that have been hidden by a past of oppression.
- Social connection agency. A database of historic memory and commitment will be created. This will put together stories of civic commitment as well as resistance to Camorra. This initiative is aimed at setting up two multimedia museums, the first named "Museum of Cultures" and the second "Museum of Resistance".

Changing Names to change Meanings

N.C.O (New Organized Cookery) = restaurant-pizzeria for the inclusion of marginalized people



Volturno (let's dress up freedom) = ethnic tailor shop where ex street workers, African women in prevalence who were rescued from the street, make Italian fashion with African fabrics.



Let's make a pacco camorra = A number of local network-based associations sold on the market several Christmas hampers filled with craft and agricultural products locally sourced.



The RES Project

The RES project is a network-based initiative that aims at reorganising community capital by capitalizing on localization and implementation of socio-cultural-economic activities. The project actively engages local people in standing up against Mafia and Camorra through promoting local and sustainable development. Specifically the project aims to spread good practices of collaborative production in places and buildings confiscated from the organised crime (under Italian law n. 109/96).



Community and Liberation Psychology for Community Development

Community Development and work-based liberation are possible only if they share a circular relationship among all the actors involved in the process, which must be dialectic, reciprocally-oriented, and participatory focused.

In the case of the RES project, the liberation-oriented Community psychology approach, combined with the vision of Community Development, has played a fundamental role in promoting inter-individual and group dialogue, which has constantly been aimed at promoting value-based relational networks and collective well-being (Natale, Arcidiacono, Di Martino, 2013).

IMPACTS OF NEW RETAIL DEVELOPMENTS ON EXISTING INNER CITY SHOPPING CENTRES AND CITY CENTRE RETAIL AREAS: A CASE STUDY OF LIVERPOOL ONE

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Keywords: Impact, Shopping Centres, City Centres, New Retail Developments

Abstract

Introduction

Making an impact through research in the retail sector is particularly significant with retail being a major contributor to the Gross Domestic Product (GDP) of the UK and being one of the world's most competitive industries. The sectors development in the UK has seen it expand dramatically and this is supported through the governments 'town centre first' approach in regards to new retail development (Department for Communities and Local Government, 2012). These changes are of particular significance in regard to the impact on retailers in traditional town centres. Taking into consideration whether the impacts of new retail developments enhance the entire city centre or whether their influence is confined locally to the location of where they have been built, offers opportunity for debate. Literature on the impact of new inner city shopping centres and city centre retail areas has also been found to be very limited.

Aim and Objectives

The aim is to examine the impacts of new retail developments on existing inner city shopping centres and city centre retail areas using Liverpool One as a case study. The aim will be achieved by examining vacancy rates, assessing the level of sales and examining the changes of occupation in Liverpool's existing inner city shopping centres and city centre retail areas since the opening of Liverpool One in 2008.

Methods

The impacts of new retail developments shall be explored using a mixed method approach. Firstly, semi-structured interviews with each of the existing inner city shopping centre managers shall be conducted. Interviews will be analysed using a thematic analysis with the aid of Nvivo software. Questionnaires shall also be distributed to the various occupiers of the individual retail outlets both in the existing shopping centres and city centre retail areas. The data shall be analysed using SPSS software. Goad Maps shall also be used to assess changes in occupation both through business type and retailer type.

Conclusion

This research offers an opportunity to consider whether the government's current 'town centre first approach' remains an appropriate policy when taking into consideration its impacts on existing inner city shopping centres and city centre retail areas. It also questions whether the impacts of regeneration through new retail developments benefit the whole of the city centre or whether this is confined to the locality of where it has been built. This study will provide a valuable contribution to an under researched area and will offer recommendations for future policy initiatives

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EXAMINING THE ROLE OF AVIATION NO_x EMISSIONS AS A SHORT LIVED CLIMATE FORCER

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Keywords: Climate change, aviation, anthropogenic impacts, radiative forcing, carbon dioxide, NO_x, emissions

Abstract

Aviation impacts the atmosphere on a global scale and its effects on the climate are still somewhat uncertain. International aviation is currently not included in the Kyoto protocol, and as a result is also not included in international emissions reductions policies. This study focuses on aviation CO₂ and NO_x emissions which in turn increase ozone concentration, and decrease methane concentrations, both of which impact on radiative forcing calculations – the primary metric used to study climate change. This PhD will use a suite of models and international aviation fuel inventories to examine these effects over different time scales. This study meets the ‘impact’ criteria as it focuses on assessing the impacts of worldwide anthropogenic travel activities on the Earths atmosphere and therefore, climate.

‘HELP IS JUST A CLICK AWAY!’— A PILOT STUDY OF SOCIAL NETWORK SITES (SNS) BASED PARENTS’ SUPPORT IN TAIWAN

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Keywords: Parental Support, Social Network Sites, Internet communication, Parenting, Children with special educational needs

Abstract

Despite the growing population of parents using Social Network Sites (SNSs) for support, research on parent’s SNSs interaction of providing and receiving support is scant. This pilot study aims to capture parent’s views on different types of support within SNSs and to understand their interaction within the SNS space. Beside thematic analysis of public web-based data, small scale interview among parental user was conducted. Three public Taiwanese parental SNS pages were selected for data analysis and four Taiwanese parents of children aged under 12-year, including two with special needs, were selected to participate in individual interviews. Findings suggest that support is less effective within public SNS pages. On the contrary, most parents suggested they received and provided parenting support frequently within private SNS space, such as personal profile pages and instant message groups. Severe SNSs usage variations among different parents were also identified. Parents’ supports within SNSs were also suggested to be beneficial in promoting parenting skills, providing emotional comfort and gaining professional knowledge. Further research based on this pilot study should be conducted to provide more complete view of the parental interaction within the SNSs.

NUMERICALLY MODELLING WAVE INTERACTIONS WITH FLOATING OBJECTS OF ARBITRARY GEOMETRY AND MOTION

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Keywords: Navier-Stokes, unstructured mesh, overset approach, parallel programming

Abstract

The generation of renewable energy is in demand due to its direct impact on the environment. As well as it being sustainable, it is clean, reducing the levels of pollutants entering the atmosphere. The government hopes to reach a target of 30% of the UK's energy being renewable by 2020. Offshore wind and marine energy can make a substantial contribution to this target.

Wave energy converters (WECs) and deep offshore floating wind turbines offer the potential for far greater output of energy, along with lower construction costs, than tidal stream turbines or near shore mounted turbines. However, they often operate in a harsh marine environment with moving or floating parts interacting with strong waves. Therefore, it is essential to evaluate the performance and stability of these devices within the design process. Fundamental to this is numerical modelling of the devices, which is the intended outcome of this research project.

This research, currently in progress, aims to produce a computational flow solver capable of numerically modelling this type of device with a high degree of accuracy. This will require the use of a two-fluid (air and water) solver, which is capable of handling complex geometries and possible arbitrary motion of floating parts.

An incompressible Navier-Stokes flow solver based on the finite volume formulation has been developed. It simulates single-fluid flow on unstructured meshes. A finite volume formulation has been chosen on the basis that it could be implemented on unstructured meshes far easier than other Eulerian methods. The use of unstructured meshes is favourable since they can be generated to better suit complex geometries than their structured counterparts. To generate these unstructured meshes, open source Matlab code was used. This code was first tested for its ability to handle multiple complex geometries. It was found to produce good quality meshes efficiently.

The flow solver will be implemented on benchmark tests and validated through comparison with published results. The first test will be the lid-driven cavity problem, which is a popular choice due to its simplicity. It consists of a square cavity full of water, with three solid walls and a lid moving with a constant velocity. The observed result is a vortex formation within the cavity.

Once fully validated, it will be extended to model two-fluid flow with overset meshing capability. An overset approach will allow for simulations of problems involving multiple moving bodies. The approach consists of sub-grids overlapping one another, each one representing a different flow feature or body. This means they can be modelled independently and allows for a combination of structured and unstructured meshes to be used as appropriate. Communication of data between the meshes must always be held.

Finally, the advanced code will be modified for parallel programming; it will be run on a High Performance Computing (HPC) cluster using a Message Passage Interface (MPI). This will allow more efficient and accurate results to be obtained for large real-world problems such as the simulation of offshore floating wind turbines or WECs.

THE IMPACT OF COUNTRY BRANDING STRATEGIES ON A COUNTRY IMAGE

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Keywords: Country image, Country brand, Country branding strategies

Abstract

Based on the literature review of the field, the aim of this research in progress is to reflect of how country branding strategies can impact on a country image from an international marketing perspective. Researchers, politicians and professionals are constantly interested in investigating and relating knowledge about the impact of country branding theories on the country image in order to advance in the global market through a country brand-oriented approach.

As this abstract presents a work in progress, both the design and the methods are still being established, however they will possibly be the mixed methods designs.

By this time, there are no conclusions and implications of this particular piece of research. However, from the literature, it can be anticipated that there is an impact of nation branding efforts into a country image, which can be researched in the globalized international business arena in order to a country progress economically abroad.

“THE ROLE OF FACEBOOK AND TWITTER IN GENERATING SOCIAL AND POLITICAL CHANGE DURING THE ARAB ‘SPRING’ UPRISINGS IN TUNISIA AND EGYPT”

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Keywords: Facebook, Twitter, Uprisings

Abstract

Overall, a relatively large amount of literature has been produced regarding the use of social media during the Arab Uprisings. For instance, writers such as Clay Shirky (2008; 2011) and Castells (2012) claim that social media is highly effective at generating social/political change. On the other hand, sceptics such as Gladwell (2010; 2011) and Morozov (2011a; 2011b) argue that the role of social media as a change-generating tool has been greatly exaggerated. However, irrespective of the stance that is taken, the majority of these authors offer their opinions without the support of detailed research and analytical findings. Furthermore, those who do carry out comprehensive studies have tended to build their arguments upon Western theoretical models, such as theories of communication (Katz and Lazarsfeld, 1955), technological determinism (McLuhan, 1967) or the public sphere (Habermas, 1984; 1991).

Therefore the aim of this research is to investigate the role of Facebook and Twitter in generating social and political change during the Arab ‘spring’ Uprisings in Tunisia and Egypt. Yet this investigation will build upon the work of social media supporters and sceptics, by also taking into consideration other factors including Arabic culture, history, and religion (Islam). This means that a number of Arabic writers, such as Dajani (2011) and Hassan (2011) will be discussed, as well as examining the possibility that social media is a new form of electronic colonialism.

In order to carry out this investigation, a research methodology will be conducted that comprises of the following: (1) Content analysis of Arabic Facebook pages will be carried out. These will be of various opposition activists and pro-regime supporters during the uprisings.

(2) Previous Twitter research for the uprisings will be referred to. These include Lotan et al (2011), Dubai School of Government 1 (2011), Dubai School of Government 2 (2012), Choudary et al (2012) and Yette (2012).

(3) Quantitative research will be conducted. An electronic questionnaire will be emailed to a selection of activists and pro-regime supporters.

(4) Qualitative research consisting of semi-structured interviews. The interviewees are editors, journalists, TV presenters and activists etc from Tunisia and Egypt.

THE ROLE OF ENDOTHELIAL MICROPARTICLES IN VASCULAR DAMAGE AND REPAIR USING IN VITRO AND EX VIVO STUDIES

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Keywords: microparticles, endothelial dysfunction, systemic lupus erythematosus, flow cytometry

Abstract

Systemic lupus erythematosus is an autoimmune disease characterized by the loss of immune tolerance and the development of antibodies against nucleic material. In addition to the classic cardiac abnormalities involving heart structure, it is known that this condition is usually tightly related to an increased risk of suffering cardiovascular disease, a major cause of mortality worldwide. Several studies have shown that lupus is associated with atherosclerotic plaque development, a condition initiated by an impaired endothelial function [1]. Endothelial microparticles are small membrane bound vesicles released by damaged or activated endothelial cells into the circulation and are analysed in plasma obtained from peripheral blood. Preliminary studies from this laboratory have suggested an increase in endothelial microparticle levels in lupus patients which inversely correlates with endothelial dysfunction [2, 3], thus it is generally accepted that they play a role in immune diseases and have potential to act as biomarkers of cardiovascular disease risk. We aim to establish the role of EMPs in disease focusing on the vascular damage associated with lupus patients. Flow cytometry is being used to quantify circulating endothelial microparticles (AnnexinV+/CD31+/CD42b-) over 2 years in 70 lupus patients pre- and post- anti-inflammatory treatment and chromatography is being used to isolate the EMPs from patient plasma. In parallel, TNF-activated human aortic endothelial cells are being used as an *in vitro* model to induce microparticle release for further functional analysis. Our results to date show that endothelial microparticle levels are significantly elevated in lupus patients in relation to healthy subjects (n=15, p<0.05) and levels are reduced following anti-inflammatory treatment. TNF-alpha has a strong effect on microparticle generation and release *in vitro* (2-fold increase, p<0.05) and current studies are investigating their role on the vessel wall. These data show that EMPs can be measured in peripheral blood and can be modulated by common anti-inflammatory therapy. Whether EMPs act to exacerbate the damage or play a role in endothelial repair remains to be elucidated. This work goes towards understanding the role of EMPs in endothelial repair and, ultimately, establishing their value as biomarkers of cardiovascular disease.

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REMOTE MONITORING SYSTEMS FOR SELF-MANAGING TYPE 2 DIABETES: A SYSTEMATIC REVIEW

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Keywords: Type 2 diabetes, self-management, Telemonitoring, Telehealth, telemedicine, Connected Health Technology, Blood Glucose Monitoring

Abstract

Aim

To evaluate evidence for feasibility and impact of telemedicine and web-based telemonitoring for managing Type 2 Diabetes Mellitus.

Methods

MEDLINE, EMBASE, CINAHL, AMED, Cochrane and PubMed were searched using the terms: telemonitoring for type-II diabetes mellitus self-management using web-based Internet solutions. The technology used, trial design, quality of life and the Glycated haemoglobin (HbA1c) outcome measures used were extracted for systemic reviews and meta-analyses, randomised controlled trials and cohort studies.

Results

426 publications were identified; 19 publications met the criteria. Ten quasi-experiments out of which seven are pre-post test studies, one is interrupted time-series study and one is cohort study and nine randomised controlled trials (RCT). Electronic transfer of glucose results from home to hospital appears to be more feasible for healthcare delivery. Six of these studies were conducted in USA, six in South Korea, three in the United Kingdom, two in Taiwan and one in each of Spain, Poland and India. The duration of the studies varied from four weeks to eighteen months and the participants were all adults. Fifteen studies showed positive improvement in HbA1c levels. One study showed high acceptance of the technology among participants.

Discussion

It remains challenging to identify evidence in the rapidly changing area of remote monitoring in diabetes care. Both the technology and its typology are complex. The optimal design of a telemedicine system is still uncertain and the impact of the real-time blood glucose transmissions is still controversial. However, this synthesis supports the use of modern technology and suggests that adoption of blood sugar monitoring is feasible, acceptable and useful. Further work is needed to provide more specific up-to-date evidence of user satisfaction, empowerment and clinical outcomes.

EFFECT OF OHMIC HEATING ON CARAMEL COLOUR CHARACTERISTICS

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Keywords: caramel colour, Ohmic heating, 4-Methylimidazole, liquid chromatography mass spectrometry

Abstract

Ohmic heating is a novel thermal processing technique. The objective of this study was to investigate the effect of extrinsic and intrinsic control parameters on caramel colour. Various formulations of invert sugar with the addition of process catalysts (NaCl, NaOH & KOH) varying from 1.5% to 5.0% were investigated. The solutions were preheated and then were ohmically treated to achieve the target temperature. Spectrophotometer colorimeter at 610nm wavelength was used to assess the colour intensity while comparing to the existing commercial sample. Liquid chromatography mass spectrometry (LCMS) analysis was tested on the experimented samples and no significant trace of 4-Methylimidazole (4-MEI) was found. This study demonstrates that Ohmic heating system offers an excellent clean label alternative to conventional caramel colour manufacturing process. Results show the potential of ohmic heating system in caramel colour manufacturing and further work is needed to provide a better process control system.

SEMANTIC RULE-BASED APPROACH TOWARDS PROCESS MINING FOR PERSONALISED ADAPTIVE LEARNING

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Keywords: process model, semantic rules, user profile, learning behaviour, event logs

Abstract

In recent years, automated learning systems are widely used for educational and training purposes within various organisations including, schools, universities and further education centres. There has been a big gap between the extraction of useful patterns from data sources to knowledge, as it is crucial that data is made valid, novel, potentially useful and understandable [1]. To meet the needs of intended users, there is requirement for learning systems to embody technologies that support learners in achieving their learning goals and this process don't happen automatically. This research propose a novel approach for automated learning that is capable of detecting changing trends in learning behaviours and abilities through the use of process mining techniques. The goal is to discover user interaction patterns within learning processes, and respond by making decisions based on adaptive rules centred on captured user profiles. The approach applies semantic annotation of activity logs within the learning process in order to discover patterns automatically by means of semantic reasoning. Therefore, our proposed approach is grounded on Semantic Modelling and Process Mining techniques. To this end, it is possible to apply effective reasoning methods to make inferences over a Learning Process Knowledge-Base that leads to automated discovery of learning patterns or behaviour.

Rule-Based Approach to Process Modeling

We focus on developing a knowledge-based application for learners and to construct ontology descriptions that allows us to express the functionality of the system; using Semantic-based models for reasoning and web languages such as OWL, SWRL and SA-MXML to represent, manipulate and query the processes to provide more enhancements to learning in the same manner as process mining.

We utilise a rule mining approach to classify learning process based on class expressions. The result are various mining techniques that provides reliable and trustworthy results for data sets by describing the process in a more detailed manner and reveals all the cases that can be created during process execution. [2] refers to these data sets that are created during process execution as Event logs.

Conclusion

It is possible to efficiently generate learning patterns based on the sequence or control-flow of captured learning profiles. The ontological concept of Semantic Annotation and Reasoning makes it possible to match same idea as well as use the coherence and structure itself to inform and answer questions of relationships. Hence, by specifying one concept (say *Learning_process*) one knows that we are also referring to another concept (*Learners or Students*) say: *Learners* learn through engaging in a *Learning_process*. Rule expression such as; *Learner(?X), hasSimilarLearningPathTo(?X, "Student_Y") -> hasCase(?X, "Student_Y")* can be derived.

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Fig 1. High-level design components of proposed Learning Process Model



ACADEMICS' JOB SATISFACTION IN ENGLISH UNIVERSITIES: INFLUENCE OF WORKING CONDITIONS AND DETERMINANTS, POST-BROWNE REVIEW

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Keywords: Job satisfaction, The Browne review (BR), Work-related stress, Resilience, Job security, Expectations

Abstract

Background

Job satisfaction is an important determinant of organisational commitment, performance and personal well-being. In the literature, there is lack of consensus in terms of academics' job satisfaction in universities especially now that the implementation of the independent review of Higher Education funding and student finance (Browne Review, 2010) has impacted academics and the service delivery of HEs. Recommendations of the Browne review in 2010 were rationalised as benefiting the sector; however, to date, there has been no systematic consideration of the impact of the changes to working conditions on the academics who work in the sector. In investigating the impact of shifts in English HE on academics' job satisfaction, this research describes a full population survey of academics in England towards investigating current well-being; thus making an impact in taking a lead to add to knowledge and make appropriate recommendations.

Aims

The aim of this study is to examine academics' job satisfaction and the factors (demographics, working conditions and determinants) that influence it in English universities.

Method

In conducting an explanatory research on the influence demographics, working conditions and determinants have on job satisfaction, an invitation to participate in a survey on working conditions was emailed to all academics in England. Analysis of 1549 usable questionnaires was undertaken to test the hypotheses of study.

Findings

Academics reported worsening working conditions in 2012-2013 compared to 2009-2010 academic session. The majority of academics reported job satisfaction despite high levels of work-related stress. This means the two variables are not two sides of the same coin (eg Cousins & Donnell, 2011). Types of university influenced academics' job satisfaction. Academics with more work experience had more job satisfaction. Associate and assistant lecturers had more job satisfaction than senior lectures and professors. Together, as a model, expectations, resilience, relationships, impact-of-the-BR, demands, peer support, and control explained 70 per cent of the variance in job satisfaction.

Implications

Expectations, followed by resilience are the strongest predictors of job satisfaction for academics in the midst of increasing stress as a result of the implementation of the Browne review in English HE. Also, control which is vital for job satisfaction is the most important element of academics' expectations and resilience. Therefore, this study recommends that the factor of control in academics' work environment should be upheld and strengthened; while areas of work that do not match their expectations compared to work realities should be looked into and resolved. In addition, instead of trying to change job characteristics for the minority of academics that were not satisfied with their job, they should and could be helped in adopting appropriate resilience strategies as a matter of intervention.

Conclusions

If academics are to achieve their full potentials and contribute meaningfully to government's reforms in HE: in terms of participation, quality and sustainability, study's findings would assist policy makers and implementers in English HE in strategising on how to improve working conditions and determinants.

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EFFECT OF VITAMIN D SUPPLEMENTATION ON MARKERS OF GLYCAEMIC CONTROL AND OXIDATIVE STRESS IN SAUDI WOMEN WITH POORLY-CONTROLLED TYPE 2 DIABETES MELLITUS

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Keywords: Vitamin D, T2DM, glycaemia

Abstract

Background

Pancreatic beta-cells express vitamin D receptors as well as the vitamin-D3-activating-enzyme (1-alpha-hydroxylase). Subsequently, vitamin D supplementation could play a practical role in reducing comorbidity in type 2 diabetics by heightening insulin sensitivity and reducing levels of Advanced Glycation End-products which play an important role in the onset and progression of diabetic complications (Ahmed, 2005). Among the female Saudi population, vitamin D deficiency and diabetes are prevalent (Alqurashi et al., 2011; Ardawi et al., 2011) but the effects of vitamin D3 supplementation programmes in relation to parameters of glycaemia and oxidative stress in T2DM is currently an area that is understudied.

Study design

A double-blind randomized controlled study will be undertaken, recruiting 156 female patients with poorly-controlled type 2 diabetes mellitus (glycated haemoglobin > 8%) from Al-Noor Hospital in Saudi Arabia and randomly allocated to a placebo, 50µg D3 or 100µg D3 intervention group. Anthropometric and dietary data will be collected at baseline, and blood samples and AGE measurements will be collected at baseline and after 16 weeks.

Methods/techniques

Blood serum will be measured for glycated haemoglobin, insulin, fasting glucose, total cholesterol, LDL, HDL and serum 25(OH)D. All serum measurements will be analysed in an automated electrochemiluminescence assay. Oxidative stress biomarkers will include F2-isoprostanes, malandialdehyde and total antioxidant levels, which will be measured using High Performance Liquid Chromatography. AGEs will be measured using an AGE reader. The outcome will be analysed using the Mann-Whitney test.

Conclusions

It is anticipated that this study will help to draw conclusions about whether vitamin D supplementation has a role in reducing glucose levels, AGEs and reactive oxygen species in type 2 diabetes mellitus in practice and whether there is a dose-dependent relationship.

AN INVESTIGATION OF THE AESTHETICS AND TECHNOLOGIES OF COLOUR CHANGEABLE TEXTILE DESIGN

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Keywords: Colour changing design, Photochromics, Dynamic patterns, Printed textiles

Abstract

Colour changing textile effects can become an innovative design tool but if these changes come unexpectedly or as a surprising encounter and disappear without leaving any traces, they can be stimulating aesthetically. Chromic material which is a niche material could be used to achieve colour changeable visual expressions on textile surfaces. These materials are often documented as 'smart materials' as they could sense and change colour in response to a range of external stimuli such as heat, light, moisture, pressure, pH level, chemical reactions and electrical current.

The focus of this on-going practice based research is on photochromic materials which change colour reversibly (colourless to colour) when activated by ultraviolet (UV) radiation. The intensity of the photochromic colour depends on incident light (UV), and when the stimulus is removed; the colour disappears as the material returns to its original configuration. The main aim of the research is to develop a design centered approach to smart colour changeable textile surfaces which could be used to enhance our visual experiences.

During the first phase of the project, multi-disciplinary experimental design research exploits the design potential of photochromic materials. This address the visual characteristics once applied through a screen printing method and knowing how a photochromic printed textile surface could be electronically activated and control the colour changing effects. The outcomes of these experimental phases will be displayed and feedback will be sought from textile design experts and a focus group as well as through a process of reflective practice by the researcher. The guided focus group interviews will address the design approach and the visual and emotional experiences that they may have on the colour changeable textile surfaces. This process will be iterative, with further experimental prototype designs being generated from initial experiments, feedback and observational or participant observational analysis.

The major impact of this project will be to establish a new creative approach to the development of electronically controllable smart colour changing textile surfaces. Experimental design research into less exploited photochromic materials with a combination of electronic technology, digital textile printing, screen printing and mixed media design techniques will further generate new design knowledge to the field. The approach that is developed from this multi-disciplinary design work will extend the boundaries for the future direction of smart textiles and open up even more new possibilities for design.

CLASSROOM BASED INTERVENTIONS FOR ACHIEVING 'DYSLEXIA-FRIENDLY' CLASSROOMS IN LANGUAGE EDUCATION: pupils', teachers' and researcher's perspectives

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Keywords: learning difficulties, dyslexia, language education, EFL/ESL, motivation

Abstract

The present study explored the issue of dyslexia inclusion in three classrooms where English is taught as a Foreign Language. The aim was to make an impact in both areas of English language teaching and dyslexia so as to provide further insights on the differentiation of pupils with dyslexia in language education. Despite the fact that the occurrence of learners with dyslexic difficulties in the language classroom is a common phenomenon little progress has been made towards the ways they can be accommodated in FL/SL/AL1 contexts. Consequently, there are many cases where these pupils are withdrawn from language contexts. The latter narrows their opportunities in today's competitive society where everyone has to learn to speak and write in more than one languages. This project focuses on the English language since it is one of the most popular languages of the world and the author's personal area of expertise. Practices designed to be 'dyslexia-friendly' (McKay 2004) were introduced in three Greek EFL classrooms in state education so as for the researcher to explore their influence on all classroom pupils' (dyslexic and non-dyslexic) performance and motivation. Moreover, EFL teachers' response to developing a dyslexia framework adopted from the UK context formed a large part of this project. The research questions were attacked from the teachers', the pupils' and the researchers' views. Initial findings suggest that there have been positive changes in the motivation of learners with dyslexia and their peers who gradually appeared more positive towards their English language class. Their views towards the EFL teachers were mixed since these were influenced from the way each teacher adapted his practice. Regarding pupils' performance, positive changes have been traced as well but not equally significant. This was possibly due to the study's time restrictions. Despite the fact that the teachers were initially hesitant towards the dyslexia training their interest gradually increased. A preference was shown towards the practices since they considered them as more straightforward and helpful. At the final stages of the project all three of them were in favour of the intervention mainly because of an increase in pupils' positive attitudes towards EFL learning. Moreover, two of the teachers sounded more confident in supporting learners with dyslexia. It must be noted that the results in each classroom vary due to different contextual influences. The purpose of exploring the workings of dyslexia friendly practices in EFL has as a purpose to provide future directions for research in any of the ESL/EFL/EAL frameworks. The need for the association of language teaching and learning difficulties in a policy level is posed so that all 'different' learners (McKay 2004) are included in the language learning contexts. In this way, "any classroom based intervention made on behalf dyslexic learners has the potential to enhance the learning of a majority of pupils especially as it enshrines the notion of responding to learning differences by changes in teaching" (British Dyslexia Association 2010).

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**EVALUATING THE IMPACT OF ALTERNATIVE LEARNING STRATEGIES IN THE
HIGHER EDUCATION DANCE TECHNIQUE CLASS. (Poster Presentation)**

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Keywords: Dance technique, pedagogy, critically reflective thinking, action research.

Abstract

How does experimenting with alternative, student-centered learning strategies impact upon the traditionally teacher-led environment of the dance technique class? If undergraduate dance students are given the opportunity to make choices about the content of the class material, does this challenge their expectations about who is responsible for their learning? Furthermore, in what way do student-centered pedagogical approaches impact upon the technique teacher's sense of authority? In response to these ideas, this poster presentation will outline some of the key research questions of my PhD study, which focuses on investigating the culture of the dance technique class and exploring the possibility to shift the traditional teacher-student hierarchy. By experimenting with alternative pedagogical approaches to those traditionally utilised in this environment, the aim of the research is to investigate whether these approaches can enable students to develop their critical and reflective thinking skills, and to rely less on the technique teacher as the only source of knowledge.

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INVESTIGATION OF DIFFERENT GEOMETRICAL PARAMETERS IN THE DESIGN OF SPIRAL-INDUCING BYPASS GRAFT

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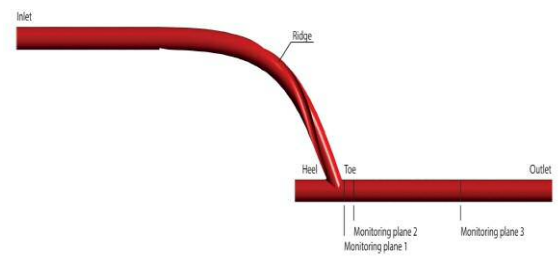
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Keywords: CFD, Design optimization, Haemodynamic, Spiral flow, Prosthetic graft

Abstract

In the present work, Computational Fluid Dynamics (CFD) has been used to simulate the blood flow through a conventional End-To-Side (ETS) distal graft anastomosis. The aim is to evaluate the effects of different geometrical design parameters as the first stage of the design optimisation process for the novel spiral-inducing prosthetic grafts. Computational techniques provide a powerful tool in order to obtain an optimal design of graft that improves the patency rate and minimises the bypass failure produced by vascular diseases such as intimal hyperplasia and thrombosis.

Since the blood motion has been identified as a spiral flow in the whole arterial system, the designs of the prosthetic graft have been addressed towards helical geometries which tend to retain this natural phenomenon. In particular, this abstract focuses on a peripheral bypass graft anastomosis that induces spiral flow by means of a helical ridge in the internal wall of the graft. Different cross-sectional designs, position and number of ridges have been tested to identify the effects of each geometrical parameter. In addition, simulations have been conducted for different Reynolds numbers (570, 1140 and 1700).



All the simulations were carried out using ANSYS CFX under steady conditions. The blood flow has been assumed as laminar, incompressible and Newtonian fluid with a density of 1040 kg/m^3 and a dynamic viscosity of $1.7264 \times 10^{-3} \text{ Pa s}$. The boundary conditions at inlet and outlet have been specified in terms of mass flow rate according with the Reynolds number simulated in each case and the walls have been assumed as rigid and no-slip.

The results showed that the orientation of the trailing edge as well as the increase of the cross-sectional area of the circular ridge, the height of the elliptical ridge and the number of ridges have a significant influence on inducing the spiral flow, in contrast with the width of the elliptical ridge whose effect is smaller.

This process has enabled us to determine the qualitative effect of each design parameter. However, the range of possible design configurations is large and it is necessary to extend the computational model in order to undertake a complete shape optimisation.

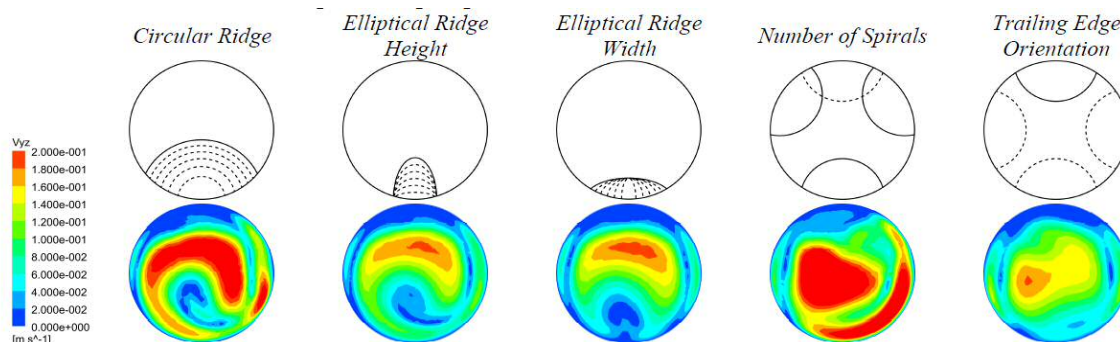


Fig. 2 Secondary velocity magnitude contours at the monitoring plane 1 for different geometrical parameters. The results correspond to the schematics with solid lines.

**DEVELOPMENT AND VALIDATION OF A MOVEMENT EVALUATION SYSTEM:
TRUNK ALIGNMENT (POSTER)**

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Keywords: Trunk alignment, movement control, 3D motion capture, video analysis

ABSTRACT – Work in progress

Background and need for the project

A primary objective of physiotherapy for adults and children with problems of movement control is to enable or restore function in an upright posture to facilitate sitting, standing and, if possible, walking. This helps independence and self-esteem. Targeted Training (TT) is a physiotherapy technique used at The Movement Centre (TMC), Oswestry. It seeks to promote postural control in children with cerebral palsy (CP) from a perspective that is based on the biomechanical requirements to execute daily activities. TT is founded in the premise that motor control learning can be simplified if the child with CP has to learn and refine the control of only one segment of the body at a time while the rest of the non-fully controlled segments are stabilised using an external support (Butler, 1991).

Quantified, objective tests of function are rare in neurophysiotherapy, as many of the main characteristics of postural control are not easily measured and thus most of the measurement outcomes remain subjective. Motion capture systems that can provide a quantitative measure of movement have been used in children with CP mainly for gait analysis (Butler et al., 1992), to illustrate the ability to reach an object (Rachwani et al., 2013), or to describe quiet sitting (Murans et al., 2011). These studies have generally taken the trunk as one rigid segment from the anterior superior iliac spines of the pelvis to the acromioclavicular joints. Nevertheless, the characteristics of the vertebral column confer a wide range of mobility to the trunk, and the morphologic differences between the vertebrae allow the distinction of sub-segments within the trunk. Although assessment of postural alignment is common in neurophysiotherapy, there is no agreed definition of 'neutral vertical posture'.

The aim of this study is thus i) to define neutral vertical postural alignment in a way that can be quantified and then ii) to develop a clinical tool that will allow an objective measurement of postural control through the quantification of alignment when the participants are not using their arms for support.

Method

Following precise definition of 'neutral vertical postural alignment' using anatomical landmarks, a 2D tracking system is used to quantify the location of landmarks on the back of the participants that represent the different levels targeted with the TT method. This uses videos collected from a lateral view of the participants, from where the specific analysis of alignment is made taking account of the relationship between the different segments and the relationship to vertical. Simultaneously, a 3D motion capture system is used as a validation method.

Clinical potential of the research

The development of an objective tool that can be used on a routine basis in the clinical environment has great potential to evaluate the outcome of physiotherapy and of other interventions in CP related to control of posture and functional abilities. A successful outcome of this study also opens the possibility of using the objective tool to evaluate the effects of therapy for other conditions and age groups. This could have a major impact in physiotherapy practice by enabling, for the first time, the objective quantification of the effects of a specific intervention or combination of interventions, and could potentially help to better understanding of the rehabilitation processes.

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TOWARDS GREENER APPROACHES FOR CHEMICAL SYNTHESIS - BALL MILLING AND MICROWAVE ASSISTED REACTIONS

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Keywords: Ball, Milling, Microwave, Assisted, Reactions, Green, Chemistry, Prozac, Synthesis

Abstract

Society is increasingly aware of the environmental impact of human activity and consequently, of the need to develop cleaner and more energy-efficient technologies.[1]

Pharmaceutical manufacturing is the most solvent-intensive and the least efficient of all chemical industries in terms of waste generated per unit of product. Statistics compiled across the industry point to an average waste-to-product ratio of 200 times. In other words, factories generate 200 pounds of waste for every pound of active pharmaceutical ingredient produced. 90% of more than 500 million tons of toxic waste that pharmaceutical companies generate each year, is solvent.[2] The transition from traditional wet technologies to dry methods for the synthesis of pharmaceuticals is a highly desirable but unexplored step that needs further investigation.[3]

Some “green” approaches that could help the pharmaceutical industry to reduce its ecological impact are the use of ball mills and microwave assisted reactions. The aim of both techniques is to reduce the amount of solvent, energy and the time used for a manufacturing process.

The application of these methods to the pharmaceutical industry would lead to a decrease in the number of technological stages, thus allowing both the simplification of the processes and the reduction of costs to the manufacturer and, ultimately, to the consumer.

This proposed research focuses on the preparation of a well-known antidepressant (Prozac) using the environmentally-friendly approaches mentioned above. A three step synthesis for Prozac has been proposed and both ball milling and microwave assisted reactions have been tried in order to simplify the process.

The utilisation of ball mill for the first step reduced to 30 min the reaction time of the 19 h process previously described in the literature.[4] Furthermore, after optimising the second step of the synthesis under microwave conditions, the reaction time was lowered to 3 h in comparison to the 16-24 h patented method.[5] More work has to be done in order to optimise the last step of the synthesis that will lead to a simpler and more eco-friendly preparation of Prozac.

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THE ROLE OF MOBILE TECHNOLOGIES ON SEAMLESS SHOPPING EXPERIENCE IN APPAREL M-RETAIL: A CASE STUDY OF TOPSHOP

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Keywords: consumer experience, mobile apps, app reviews, apparel, m-retail, mobile fashion consumer, consumer behaviour, smart phones, fashion retail, consumer segmentation, Topshop

Abstract

Introduction

As mobile apparel retail websites and apps grow in popularity, and apparel retailers in the UK are leading in e-commerce, insight into the psychology and behaviours of shoppers using these mobile interfaces has become more important. Retailers need to develop an understanding about mobile consumers' behaviour in m-retail, their experience, attitudes and expectations. Mobile fashion consumers seem to use websites on their smartphones despite the wide range of mobile apps available. A case study will help to establish whether the same mobile apparel apps are communicating in the same way through different operating system platforms. The analysis of mobile app reviews will help to gain insight into consumers' behaviour, expectations using mobile channel, and identify key factors required for seamless shopping experience. This is the first study focusing on critical issues of fashion m-retail's environment based on mobile fashion consumers' behaviour and shopping experience.

Method

The qualitative research design was utilised and the content analysis of mobile app reviews for iOS and Android OS was conducted in chronological order. App reviews were analysed in terms of navigational, technological, organisational and motivational factors and design features from retailer's and consumer's perspectives.

Dataset

The primary data for this study were gathered over a period of six months. The dataset contains 1,313 reviews of Topshop mobile apps for iOS and Android OS. These reviews were retrieved for analysis from Apple Inc.'s App Store and Google Inc.'s Google Play, and span from July 2010 to April 2014.

Findings

Results from the data suggest that retailers did not meet consumers' expectations so far, and are at the risk of missing great opportunities from this mobile revolution. Cluster analysis of the data from Topshop mobile app reviews, utilizing NVivo 10, was used in developing the 6 most commented problems of Topshop mobile apps. The results suggest an association between a specific behaviour of reviewers, such as exit points from the app, and some app problem areas. Apparel consumers expect to be able to shop using multiple channels and to receive "a great mobile shopping service". Nine mobile fashion consumer types were identified - Impulse shoppers, Addicted shoppers, Style conscious consumers, Sustaining returners, Occasional shoppers, Bargain hunters, Convenience seekers, Connected browsers, Bored commuters - based on motivations to use mobile apps. Appropriate marketing strategies can be developed, guided by the specific mobile fashion consumer type's shopping journey. Apparel retailers can better define their target consumers and more effectively tailor mobile interfaces to meet customer needs.

Conclusions

This case study demonstrates the key factors that influence consumers to avoid mobile apps and the reasons for consumers' dissatisfaction with mobile channel. This study will provide a valuable contribution to the area of m-commerce in the UK and offers recommendations for future improvements needed to satisfy consumers' needs for seamless shopping experience.

CARBON OFFSETTING IN AVIATION

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Keywords: Aviation, Behaviour, Carbon offsetting, Consumers, CSR, Sustainability

Abstract

Literature Review, Methods and Preliminary Results

Introduction

Carbon offset schemes are a component of airlines' voluntary delivery of their ethical commitments towards sustainable development, in situations where the law is arguably inadequate at present (Tsai and Hsu, 2008). Under such schemes, individuals may make a voluntary contribution with the purpose of offsetting the share of carbon emitted from one sector activity by reducing the amount emitted in or by another (Becken and Hay, 2007).

However, not only are such schemes voluntary for airlines, carbon offsetting is equally voluntary for the air traveller as well. To gain contemporary insights into the prospects of carbon offsetting, for the purpose of climate change mitigation, this exploratory empirical study attempts to make an impact by investigating interactions between Consumers' Knowledge, Attitudes and Practices (C-KAPs), and Airline Corporate Social Responsibility (A-CSR) Policies and Practices on voluntary Carbon offsets.

Proposed Methods

In brief, this study is conducted in two stages with the data collection process entailing a mixed-method approach, integrating both quantitative and qualitative means. Primary data is obtained via focus groups, questionnaires and interviews since the combination of "qualitative - quantitative - qualitative" research enables the researcher to triangulate by testing hypotheses and drawing conclusions based on a substantial volume of both quantitative and qualitative data analysis (Kumar, 2014).

Qualitative transcript data derived from focus groups and interviews will be analysed using content analysis. The narrative will be read in depth employing the Nvivo software to assist with organising and analysing non-numerical and unstructured information, examining relationships in the data and allowing similarities and differences to be revealed (Bazeley, 2007). Whilst, the questionnaire survey will be analysed using the SPSS. The nature of each of the variables will be identified and a decision will be made on whether a parametric, such as T-tests, ANOVA, Pearson correlation, or non-parametric such as Chisquare, Kruskal-Wallis, Mann-Whitney U, techniques are to be employed (Pallant, 2007).

Preliminary Findings

Unfortunately, preliminary results as far as empirical research is concerned could not be yield at this stage of the study, due to the fact that this project is designed so as to yield results at a later stage of the research process. Analysis of the findings, however, is expected to yield significant study conclusions, from which recommendations will derive and may range from new insights about most effective ways of communicating the need for CO₂ offsetting, to potential approaches to raise levels of voluntary participation.

Preliminary Conclusions

Drawing preliminary conclusions at this stage is admittedly a very challenging thing due to the fact that issues emerging from the literature review require further exploration in terms of empirical research. However, the researcher is suspecting that a reciprocal relationship exists between changes in behaviour and changes in attitude. Since changes in behaviour may induce changes in attitude and the opposite as Dobson (2009) advises. In other words, behaviour could be habituated if it was changed over a period of time (ibid).

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QUALITY MANAGEMENT IN THE MALAYSIAN GARMENT INDUSTRY – EMPIRICAL EVIDENCE FROM THE PILOT SURVEY

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Keywords: Quality Management, Quality Control, Inspection, Garment Manufacturing

Abstract

In today's global and competitive business environment, garment manufacturing is remain as a labour intensive industry (Varukolu and Poaps, 2009). Quality became the main areas of concern amongst garment manufacturers due to reliance to the skills of workers and a complicated manufacturing process (Crinis, 2010). Hence, delivering a high quality garments at a low cost in shorter lead-time are the challenges faced by the industry (Silva et al., 2011). Malaysia still provides a viable site for apparel business and remains a popular sourcing country for the international buyers from the United States and Europe (Crinis, 2012). The local manufacturers also have embarked on their own brand manufacturing and a retail business for a long-term survival (Crinis, 2012).

The aim of this study was to collate the quality management (QM) practices in the Malaysian garment-manufacturing sector and to determine the systems that are the most dominant in the garment manufacturing industry typically for the large-scale production of garments.

The quantitative research design was utilised to achieve the aims of the study. The on-line survey was used as a research instrument with different sections developed to gather information associated with the implementation of quality system, quality control and inspection methods in the garment companies. The companies that participated in the study were obtained from the Malaysian Textile Manufacturer Association (MTMA), Malaysian Knitting Manufacturer Association (MKMA) and from the selected Government Agencies website. Several quality experts in the field were involved in the pretesting process of the survey before the soft launch of the survey took place. The replied survey is then analysed by using frequency and descriptive statistics.

The findings reveal that not all companies have an appropriate quality system and the accreditation to quality management system is not a major concern for a small-size enterprise compared to medium-size enterprise and large companies. All companies have conducted their own quality control and inspection procedures but still relying on the internal inspection systems to monitor quality of manufactured garments. The results of the pilot study also suggest some elements in the manufacturing that affect the quality management activities amongst manufacturer that supply to domestic and international market.

The empirical evidence collated identifies the quality management practices of the Malaysian garment manufacturers, irrespective of the company's size and the destination of the finished garment. The full launch of the survey to the remaining companies may help researcher to understand the status of QM practices amongst Malaysian garment companies, which will give the impact to the quality of mass-produced garments in Malaysia for the local and export market.

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EFFECT OF OMEGA-3 NANO-EMULSION STABILIZED WITH VARIOUS EMULSIFIERS ON SENSORY PROPERTIES OF ORANGE JUICE

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Keywords: Omega-3, nano-emulsion, sensory profile, Algae oil, Lecithin, Tween 40, Tween 60

Background

The current delivery system of nutrients in the market could be further improved by using nano-emulsion technology instead of just simply enriching with micronutrients to enhance the nutritional properties. Omega-3 fatty acids are a set of polyunsaturated fatty acids, found in deep-sea fishes and certain plants that are beneficial to human health (Meyer *et al.*, 2003). The previous studies showed that nano-emulsion of enriched nutrients had significantly negative effects on sensory attributes of food (Lane, 2013), and demonstrated the sensory characteristics varied with emulsifiers and drop sizes of emulsions (Van Ruth *et al.*, 2002).

Objective

To evaluate the sensory profile and consumer acceptability of orange juice with the incorporation of omega-3 nano-emulsion stabilized by various emulsifiers, including lecithin, 50 per cent lecithin plus 50 per cent Tween 40, Tween 40 and Tween 60 by a sensory testing with 40 panellists.

Method

Nano-emulsion of omega-3 fatty acids oil was prepared with selected 6% (w/w) of emulsifiers, i.e. lecithin, Tween 40, Tween 60, equal ratio of Tween40 and lecithin and 50% (w/w) of Algae oil (Life DHATM S35-O300, DSM Ltd., Columbia) and 44% (w/w) of water on homogenizer (Silverson Machine Ltd, England) and ultrasonic processor (UP 400, Hielscher, Germany). 95.7g of orange juice (Waitrose smooth orange juice, Waitrose Ltd.) was incorporated with 4.3g of omega-3 nano-emulsions to increase DHA content to 750mg per 100g orange juice sample, to achieved the level of 200-1000mg omega-3 daily intake for health improvement (WHO, 2003). The seven sensory attributes of orange juice samples, i.e. appearance, smell, flavour, texture, consistency, aftertaste and overall acceptability were collected by FIZZ Bio-systems (2012), which was evaluated by sensory panel, and the score of sensory attributes analysed with the ANOVA (SPSS statistic 21).

Results

The results show that the sensory attributes, smell, flavour, aftertaste and overall acceptability of orange juice enriched with omega-3 nano-emulsion were statistically significance lower than that of control sample ($P \leq 0.05$), and especially the overall acceptability of orange juice with nano-emulsion sample was reduced by almost 50% compared with the control sample. However, there are no statistically significant difference were found between all tested samples when consistency was compared. Interestingly, the comparison between the juice samples with tested nanoemulsion prepared with various emulsifiers did not show significantly difference on the six sensory attributes, except appearance, which demonstrated that the juice with nano-emulsion stabilized by lecithin only was better than the juice sample with other three nano-emulsion, respectively with Tween 40, Tween 60 and 50% Tween 40 plus 50% lecithin.

Conclusion

The omega-3 nano-emulsions with emulsifiers have a significant negative effect on the smell, flavour, texture, aftertaste and overall acceptability of the orange juice. Further improvement on the omega-3 nano-emulsion sensory profile will carried out in the future study.

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THE INFLUENCE OF AMELIORATIVE MATERIALS ON THE MOBILITY AND SOLUBILITY OF HEAVY METAL OF A CONTAMINATED SOIL

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Keywords: Amaranthus viridis. Red Mud. Gravel Sludge. Leachability

Abstract

The study investigated the influence of ameliorative material on the mobility and solubility of heavy metals of a contaminated soil of Nekede mechanic village. A randomized combination of 2:1 ratio of heavy metal soil (HM-Soil) and mineral amendment of Gravel sludge (GS) and Red mud (RM) were used with amaranthus viridis as a test crop. Seven(7) parameters: Zinc(Zn), Copper(Cu), Lead(Pb), Cadmium(Cd), pH, Electrical Conductivity(EC)and Organic Carbon(OC) were investigated across the sampling points. Samples were analyzed using standard methods with initial metal content determined by inductively coupled plasma-mass spectrometry (ICP-MS) (Perkin ELMER ELAN 6100) after digesting soil in aqua regia (Baker & Amacher 1982) and plant material in a 20ml HNO₃ & 4ml HClO₄ acid. Extractable metal fractions were also determined by using diethylene triamine pentacetic (DTPA). The amendment application of red mud (RM) and gravel sludge (GS) to the soil immobilized the mobility and solubility of these metals, thereby reducing the uptake into the test crop. Results obtained showed that combined HM+RM+ GS were more effective in the reduction of heavy metals mobility and leachability in the soil fractions when compared to the single application amendments. This results are in their reducing order of effective performance: Cd (12.3±0.1) < Cu (282.6±0.3) < Zn (421.3±0.1) < Pb (543.2±0.0).

AN OVERVIEW OF SUPPLIER SELECTION: KEY ISSUES/PROBLEMS, LITERATURE REVIEW METHODOLOGY AND EMPIRICAL FINDINGS

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Keywords: supply chain, supplier selection, artificial intelligence, business intelligence

Abstract

Supplier selection is one of the most important activities in supply chain management but it is faced with a number of problems and issues. The choice of supplier can impact on company performance in terms of productivity, product quality, cost and service levels. The main research areas include: the current state of use of information technology and business intelligence tools; the use of artificial intelligence tools or technologies and business intelligence tools; and appropriate supplier selection criteria and process. Many research articles and studies have addressed relevant issues by providing solutions to existing problems, some of which are information technology tools and frameworks. However, the problems/issues are still under the spotlight as this is seen, as a multi-dimensional problem that these solutions still has not solved. This research will discuss the key literature points about supplier selection issues, the methodology and highlight some key findings from pilot studies and a web based questionnaire.

THE USE OF DANCE IMPROVISATION AND CHOREOGRAPHY AS A RESEARCH TOOL

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Keywords: performative social science, videodance, improvisation, feminist gerontology, embodied

Abstract

Brief Description

The selected pieces are representative selection of aspects of my research process.

Social work 3

A piece where I am improvising a physical response to an aspect of my research; the work involved in maintaining a social network (the literature on loneliness in older age makes frequent reference to women having better social support systems but scant mention of the work involved in maintaining that network)

Transfer report

A reflexive videodance on the process of writing the transfer report. As an embodied researcher, I struggle both with sitting still and writing and expressing myself on the flat page. The choreography and film work also indicates other areas of struggle during writing.

Dancing in a cupboard

A site specific improvisation. Can be read as a metaphor for an embodied researcher (without a head) or as a feminist, arts researcher who has to conduct her research out of sight of the patriarchal university.

Loneliness is a cloak you wear

A videodance created using choreography from older dancers exploring the themes of loneliness using the lyrics of the Walker Brother's song 'The Sun Ain't Gonna Shine' as a starting point. This video was created for the Women, Ageing and Media summer school held at University of Cheltenham in 2014.

Successful ageing

Following the showing of 'Loneliness is a Cloak You Wear', I received audience feedback that suggested the dancers involved in the choreography were not ageing successfully because the dance seated. This improvisation explores seated dance and finds that sitting to dance is not necessarily restricted to older people.

Impact

Conquergood uses performance to 'pull an audience into a sense of the other' (Conquergood, 2007:59); arts offers a way for a 'reader' of research to empathise in a visceral way with the 'researched'. Not only can the impact be felt keenly at a bodily level, the arts have the potential to reach a wider audience than traditional published research.

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https://www.youtube.com/playlist?list=PLeBr2PsnRJQF81T7NDimThFTWPbfmDgG_

ART INSTALLATION “WOMEN PLUS”, “FOR THE FUTURE”

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Keywords: women, feminism, Chinese culture, colour, materials, movement, heritage, oral history, objects, text, democracy, civil disobedience, freedom

“Women Plus”

Brief Description

This series of works was created when I was invited to contribute to a collective textile project in Cumbria. When I did my research on Chinese writing, I realised that there were a lot of Chinese characters based on the word woman, which was quite interesting to me as one of my areas of interest is feminism. In the past, people were more aware of their mothers than their fathers, which could be due to the natural bond between mother and child. So a lot of Chinese surnames included a female character. It was a facilitating discovery. I picked ten Chinese characters and made ten individual pieces for an exhibition in Manchester. The characters I chose were based on the meaning and the shapes. Because colours are important to me and my work, I use colourful fabric and felt to create the artwork. In this piece the character, “good”, consists of two different characters, “female” (woman) on the left and “male” (son) on the right. When the two are together, it turns into “good”.



Impact

When I hung the works, they were no longer some kind of ancient Chinese writing, but transformed into other images. Some people can see animals and plants, some may see religious symbols and others may see women's symbols too. They are not solid but moving, like dancing images. I have combined Chinese culture, feminist ideas and artistic elements in the work. They speak to me as well as to the audience.

“For Hong Kong Democracy”

Brief description

The "Umbrella Movement" in Hong Kong has made a major impact on me. I was involved with the democratic movement in Hong Kong in the 80's and 90's, but I have never seen a movement with such powerful momentum before. I had to make artwork in response to it.

The movement first started over a month ago when students went on strike. Then "Occupy Central with Love and Peace" followed. It has attracted hundreds and thousands of people joining in to block three main financial and commercial areas.

What the Hong Kong people ask for is universal suffrage, which was promised by the Chinese and British Governments when they signed the Joint Declaration in 1984.

I am very touched by my fellow Hong Kong people, especially students. They have sacrificed their personal interests and comfort to sleep on the streets, been misunderstood, even scolded and attacked by mobs and the police. Yet, they insist of non-violent civil disobedient protests.

Impact

Throughout this period, they have gained a lot of awareness and support, locally and globally. I have seen a lot of beautiful people through their explosive creative power, the images of yellow ribbons, umbrellas and banners, plus songs on social media and the news. This is not an easy battle. Yet, Hong Kong people have shown the world that they are serious and determined to fight for democracy and freedom. I would like to dedicate my work to them.